

Sequence Listing - P3230R1C1.txt  
Sequence Listing

<110> Eaton,Dan L.  
Filvaroff,Ellen  
Gerritsen,Mary E.  
Goddard,Audrey  
Godowski,Paul J.  
Grimaldi,Christopher J.  
Gurney,Austin L.  
Watanabe,Colin K.  
Wood,William I.

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ACIDS ENCODING THE SAME

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Val Thr Leu His His Ile Asp Pro Ala Leu Pro Tyr Ile Ser Asp  
35 40 45

Thr Gly Thr Val Ala Pro Glu Lys Cys Leu Phe Gly Ala Met Leu  
50 55 60

Asn Ile Ala Ala Val Leu Cys Ile Ala Thr Ile Tyr Val Arg Tyr  
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Lys Gln Val His Ala Leu Ser Pro Glu Glu Asn Val Ile Ile Lys  
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Leu Asn Lys Ala Gly Leu Val Leu Gly Ile Leu Ser Cys Leu Gly  
95 100 105

Leu Ser Ile Val Ala Asn Phe Gln Lys Thr Thr Leu Phe Ala Ala  
110 115 120

His Val Ser Gly Ala Val Leu Thr Phe Gly Met Gly Ser Leu Tyr  
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Met Phe Val Gln Thr Ile Leu Ser Tyr Gln Met Gln Pro Lys Ile  
140 145 150

His Gly Lys Gln Val Phe Trp Ile Arg Leu Leu Leu Val Ile Trp  
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Cys Gly Val Ser Ala Leu Ser Met Leu Thr Cys Ser Ser Val Leu  
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His Ser Gly Asn Phe Gly Thr Asp Leu Glu Gln Lys Leu His Trp  
185 190 195

Asn Pro Glu Asp Lys Gly Tyr Val Leu His Met Ile Thr Thr Ala  
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Ala Glu Trp Ser Met Ser Phe Ser Phe Phe Gly Phe Phe Leu Thr  
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Tyr Ile Arg Asp Phe Gln Lys Ile Ser Leu Arg Val Glu Ala Asn  
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Lys Asp Tyr Glu Ile Arg Gln Tyr Val Val Gln Val Ile Phe Ser  
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Val Thr Phe Ala Phe Ser Cys Thr Met Phe Glu Leu Ile Ile Phe  
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Glu Ile Leu Gly Val Leu Asn Ser Ser Ser Arg Tyr Phe His Trp  
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Lys Met Asn Leu Cys Val Ile Leu Leu Ile Leu Val Phe Met Val  
80 85 90

Pro Phe Tyr Ile Gly Tyr Phe Ile Val Ser Asn Ile Arg Leu Leu  
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His Lys Gln Arg Leu Leu Phe Ser Cys Leu Leu Trp Leu Thr Phe  
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Met Tyr Phe Phe Trp Lys Leu Gly Asp Pro Phe Pro Ile Leu Ser  
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Pro Lys His Gly Ile Leu Ser Ile Glu Gln Leu Ile Ser Arg Val  
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Gly Val Ile Gly Val Thr Leu Met Ala Leu Leu Ser Gly Phe Gly  
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Ala Val Asn Cys Pro Tyr Thr Tyr Met Ser Tyr Phe Leu Arg Asn  
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Arg Arg Thr Met Phe Gln Lys Gly Glu Val His Asn Lys Pro Ser  
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Thr Lys Glu Arg Ile Glu Tyr Ser Lys Thr Phe Lys Gly Lys Tyr  
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Phe Asn Phe Leu Gly Tyr Phe Phe Ser Ile Tyr Cys Val Trp Lys  
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Ile Phe Met Ala Thr Ile Asn Ile Val Phe Asp Arg Val Gly Lys  
305 310 315

Thr Asp Pro Val Thr Arg Gly Ile Glu Ile Thr Val Asn Tyr Leu  
320 325 330

Gly Ile Gln Phe Asp Val Lys Phe Trp Ser Gln His Ile Ser Phe  
335 340 345

Ile Leu Val Gly Ile Ile Ile Val Thr Ser Ile Arg Gly Leu Leu  
350 355 360

Ile Thr Leu Thr Lys Phe Phe Tyr Ala Ile Ser Ser Ser Lys Ser  
365 370 375

Ser Asn Val Ile Val Leu Leu Leu Ala Gln Ile Met Gly Met Tyr  
380 385 390

Phe Val Ser Ser Val Leu Leu Ile Arg Met Ser Met Pro Leu Glu  
395 400 405

Tyr Arg Thr Ile Ile Thr Glu Val Leu Gly Glu Leu Gln Phe Asn  
410 415 420

Phe Tyr His Arg Trp Phe Asp Val Ile Phe Leu Val Ser Ala Leu  
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<211> 322

<212> PRT

Sequence Listing - P3230R1C1.txt

<213> Homo Sapien

<400> 6

Met Ala Arg Cys Phe Ser Leu Val Leu Leu Leu Thr Ser Ile Trp  
1 5 10 15

Thr Thr Arg Leu Leu Val Gln Gly Ser Leu Arg Ala Glu Glu Leu  
20 25 30

Ser Ile Gln Val Ser Cys Arg Ile Met Gly Ile Thr Leu Val Ser  
35 40 45

Lys Lys Ala Asn Gln Gln Leu Asn Phe Thr Glu Ala Lys Glu Ala  
50 55 60

Cys Arg Leu Leu Gly Leu Ser Leu Ala Gly Lys Asp Gln Val Glu  
65 70 75

Thr Ala Leu Lys Ala Ser Phe Glu Thr Cys Ser Tyr Gly Trp Val  
80 85 90

Gly Asp Gly Phe Val Val Ile Ser Arg Ile Ser Pro Asn Pro Lys  
95 100 105

Cys Gly Lys Asn Gly Val Gly Val Leu Ile Trp Lys Val Pro Val  
110 115 120

Ser Arg Gln Phe Ala Ala Tyr Cys Tyr Asn Ser Ser Asp Thr Trp  
125 130 135

Thr Asn Ser Cys Ile Pro Glu Ile Ile Thr Thr Lys Asp Pro Ile  
140 145 150

Phe Asn Thr Gln Thr Ala Thr Gln Thr Thr Glu Phe Ile Val Ser  
155 160 165

Asp Ser Thr Tyr Ser Val Ala Ser Pro Tyr Ser Thr Ile Pro Ala  
170 175 180

Pro Thr Thr Thr Pro Pro Ala Pro Ala Ser Thr Ser Ile Pro Arg  
185 190 195

Arg Lys Lys Leu Ile Cys Val Thr Glu Val Phe Met Glu Thr Ser  
200 205 210

Thr Met Ser Thr Glu Thr Glu Pro Phe Val Glu Asn Lys Ala Ala  
215 220 225

Phe Lys Asn Glu Ala Ala Gly Phe Gly Gly Val Pro Thr Ala Leu  
230 235 240

Leu Val Leu Ala Leu Leu Phe Phe Gly Ala Ala Ala Gly Leu Gly  
245 250 255

Phe Cys Tyr Val Lys Arg Tyr Val Lys Ala Phe Pro Phe Thr Asn



Sequence Listing - P3230R1C1.txt

260	265	270
Lys Asn Gln Gln Lys Glu Met Ile Glu Thr Lys Val Val Lys Glu		
275	280	285
Glu Lys Ala Asn Asp Ser Asn Pro Asn Glu Glu Ser Lys Lys Thr		
290	295	300
Asp Lys Asn Pro Glu Glu Ser Lys Ser Pro Ser Lys Thr Thr Val		
305	310	315
Arg Cys Leu Glu Ala Glu Val		
320		

<210> 7

<211> 2586

<212> DNA

<213> Homo Sapien

<400> 7

cgccgcgctc ccgcacccgc ggcccgccca ccgcgccgct cccgcatctg 50

cacccgcagc ccggcggcct cccggcgagg ggcagcagat ccagtccggc 100

ccgcagcgcg actcgggtcca gtcggggcggg cggctgcggg cgcagagcgg 150

agatgcagcg gcttggggcc accctgtgtg gcctgtgtgt ggcgggcgcg 200

gtccccacgg ccccgcgccc cgctccgacg ggcacctcgg ctccagtcaa 250

gccccggccc gctctcagct acccgcagga ggaggccacc ctcaatgaga 300

tgttccgcga ggttgaggaa ctgatggagg acacgcagca caaattgcgc 350

agcgcggtgg aagagatgga ggcagaagaa gctgctgcta aagcatcatc 400

agaagtgaac ctggcaaact tacctcccag ctatcacaat gagaccaaca 450

cagacacgaa ggttggaat aataccatcc atgtgcaccg agaaattcac 500

aagataacca acaaccagac tggacaaatg gtcttttcag agacagttat 550

cacatctgtg ggagacgaag aaggcagaag gagccacgag tgcacatcgc 600

acgaggactg tgggcccagc atgtactgcc agtttgccag cttccagtac 650

acctgccagc catgccgggg ccagaggatg ctctgcaccc gggacagtga 700

gtgctgtgga gaccagctgt gtgtctgggg tcactgcacc aaaatggcca 750

ccaggggagc caatgggacc atctgtgaca accagagggg ctgccagccg 800

gggctgtgct gtgccttcca gagaggcctg ctgttcctg tgtgcacacc 850

cctgcccgtg gagggcgagc ttgcatga ccccgccagc cggcttctgg 900

Sequence Listing - P3230R1C1.txt

acctcatcac ctgggagcta gaggctgatg gaggcttgga ccgatgccct 950  
tgtgccagtg gcctcctctg ccagcccccac agccacagcc tgggtgatgt 1000  
gtgcaagccg accttcgtgg ggagccgtga ccaagatggg gagatcctgc 1050  
tgcccagaga ggtccccgat gagtatgaag ttggcagctt catggaggag 1100  
gtgcccagg agctggagga cctggagagg agcctgactg aagagatggc 1150  
gctgggggag cctgcggctg ccgccgtgc actgctggga ggggaagaga 1200  
ttagatctg gaccaggctg tgggtagatg tgcaatagaa atagctaatt 1250  
tattcccca ggtgtgtgct ttaggcgtgg gctgaccagg cttcttcta 1300  
catcttctc ccagtaagt tccctctgg ctgacagca tgagggttg 1350  
tgcattgtt cagctcccc aggctgttct ccaggcttca cagtctggtg 1400  
cttgggagag tcaggcaggg ttaaactgca ggagcagttt gccaccctg 1450  
tccagattat tggctgctt gcctctacca gttggcagac agccgtttgt 1500  
tctacatggc ttgataatt gtttgagggg aggagatgga aacaatgtgg 1550  
agtctccctc tgattggtt tggggaaatg tggagaagag tgcctgctt 1600  
tgcaaacatc aacctggcaa aaatgcaaca aatgaattt ccacgcagtt 1650  
ctttcatgg gcataggtaa gctgtgcctt cagctgttgc agatgaaatg 1700  
ttctgttcac cctgcattac atgtgtttat tcatccagca gtgttgctca 1750  
gctcctacct ctgtgccagg gcagcattt catatccaag atcaattccc 1800  
tctctcagca cagcctggg aggggggtcat tgttctctc gtccatcagg 1850  
gatctcagag gctcagagac tgcaagctgc ttgcccaagt cacacagcta 1900  
gtgaagacca gagcagttt atctggttgt gactctaagc tcagtgtctt 1950  
ctccactacc ccacaccagc ctgggtgcca caaaagtgc tccccaaaag 2000  
gaaggagaat gggattttt ttgaggcatg cacatctgga attaaggta 2050  
aactaattct cacatccctc taaaagtaaa ctactgttag gaacagcagt 2100  
gttctcacag tgtggggcag ccgtccttct aatgaagaca atgatattga 2150  
cactgtccct cttggcagt tgcattagta actttgaaag gtatatgact 2200  
gagcgtagca tacaggtaa cctgcagaaa cagtacttag gtaattgtag 2250

Sequence Listing - P3230R1C1.txt

ggcgaggatt ataaatgaaa ttgcaaaat cacttagcag caactgaaga 2300  
caattatcaa ccacgtggag aaaatcaaac cgagcagggc tgtgtgaaac 2350  
atggttgtaa tatgcgactg cgaacactga actctacgcc actccacaaa 2400  
tgatgttttc aggtgtcatg gactgttgcc accatgtatt catccagagt 2450  
tcttaaagtt taaagttgca catgattgta taagcatgct ttctttgagt 2500  
tttaaattat gtataaacat aagttgcatt tagaaatcaa gcataaatca 2550  
cttcaactgc aaaaaaaaaa aaaaaaaaaa aaaaaa 2586

<210> 8

<211> 350

<212> PRT

<213> Homo Sapien

<400> 8

Met Gln Arg Leu Gly Ala Thr Leu Leu Cys Leu Leu Leu Ala Ala  
1 5 10 15

Ala Val Pro Thr Ala Pro Ala Pro Ala Pro Thr Ala Thr Ser Ala  
20 25 30

Pro Val Lys Pro Gly Pro Ala Leu Ser Tyr Pro Gln Glu Glu Ala  
35 40 45

Thr Leu Asn Glu Met Phe Arg Glu Val Glu Glu Leu Met Glu Asp  
50 55 60

Thr Gln His Lys Leu Arg Ser Ala Val Glu Glu Met Glu Ala Glu  
65 70 75

Glu Ala Ala Ala Lys Ala Ser Ser Glu Val Asn Leu Ala Asn Leu  
80 85 90

Pro Pro Ser Tyr His Asn Glu Thr Asn Thr Asp Thr Lys Val Gly  
95 100 105

Asn Asn Thr Ile His Val His Arg Glu Ile His Lys Ile Thr Asn  
110 115 120

Asn Gln Thr Gly Gln Met Val Phe Ser Glu Thr Val Ile Thr Ser  
125 130 135

Val Gly Asp Glu Glu Gly Arg Arg Ser His Glu Cys Ile Ile Asp  
140 145 150

Glu Asp Cys Gly Pro Ser Met Tyr Cys Gln Phe Ala Ser Phe Gln  
155 160 165

Tyr Thr Cys Gln Pro Cys Arg Gly Gln Arg Met Leu Cys Thr Arg  
170 175 180

Sequence Listing - P3230R1C1.txt

Asp Ser Glu Cys Cys Gly Asp Gln Leu Cys Val Trp Gly His Cys  
185 190 195

Thr Lys Met Ala Thr Arg Gly Ser Asn Gly Thr Ile Cys Asp Asn  
200 205 210

Gln Arg Asp Cys Gln Pro Gly Leu Cys Cys Ala Phe Gln Arg Gly  
215 220 225

Leu Leu Phe Pro Val Cys Thr Pro Leu Pro Val Glu Gly Glu Leu  
230 235 240

Cys His Asp Pro Ala Ser Arg Leu Leu Asp Leu Ile Thr Trp Glu  
245 250 255

Leu Glu Pro Asp Gly Ala Leu Asp Arg Cys Pro Cys Ala Ser Gly  
260 265 270

Leu Leu Cys Gln Pro His Ser His Ser Leu Val Tyr Val Cys Lys  
275 280 285

Pro Thr Phe Val Gly Ser Arg Asp Gln Asp Gly Glu Ile Leu Leu  
290 295 300

Pro Arg Glu Val Pro Asp Glu Tyr Glu Val Gly Ser Phe Met Glu  
305 310 315

Glu Val Arg Gln Glu Leu Glu Asp Leu Glu Arg Ser Leu Thr Glu  
320 325 330

Glu Met Ala Leu Gly Glu Pro Ala Ala Ala Ala Ala Ala Leu Leu  
335 340 345

Gly Gly Glu Glu Ile  
350

<210> 9

<211> 1395

<212> DNA

<213> Homo Sapien

<400> 9

cggacgcgtg ggcggacgcg tgggggctgt gagaaagtc caataaatac 50

atcatgcaac cccacggccc acctgtgaa ctctctgtgc ccagggtga 100

tgtgcgtctt ccagggtac tcatccaaag gcctaataca acgttctgtc 150

ttcaatctgc aaatctatgg ggtcctgggg ctcttctgga cccttaactg 200

ggtagtgccc ctgggccaat gcgtctctgc tggagccttt gcctccttct 250

actgggcctt ccacaagccc caggacatcc ctaccttccc cttaatctct 300

Sequence Listing - P3230R1C1.txt

gccttcatcc gcacactccg ttaccacact gggtcattgg catttgagc 350  
 cctcatcctg acccttgtgc agatagcccg ggtcatcttg gagtatattg 400  
 accacaagct cagaggagtg cagaaccctg tagcccgctg catcatgtgc 450  
 tgtttcaagt gctgcctctg gtgtctggaa aaatttatca agttcctaaa 500  
 ccgcaatgca tacatcatga tcgccatcta cggaagaat ttctgtgtct 550  
 cagccaaaaa tgcgttcattg ctactcatgc gaaacattgt cagggtggtc 600  
 gtcttgga aagtcacaga cctgtgtctg ttctttggga agctgtggt 650  
 ggtcggaggc gtgggggtcc tgtccttctt tttttctcc ggtcgcaccc 700  
 cggggctggg taaagacttt aagagcccc acccaacta ttactggctg 750  
 cccatcatga cctccatcct gggggcctat gtcacgcca gcggcttctt 800  
 cagcgtttc ggcattgttg tggacacgct cttcctctgc ttctggaag 850  
 acctggagcg gaacaacggc tcctggacc ggcctacta catgtccaag 900  
 agccttctaa agattctggg caagaagaac gaggcgcccc cggacaacaa 950  
 gaagaggaag aagtgcacgc tccggccctg atccaggact gcacccacc 1000  
 cccaccgtcc agccatccaa cctcacttcg ccttacaggt ctccatttg 1050  
 tggtaaaaaa aggttttagg ccaggcgccg tggctcacgc ctgtaatcca 1100  
 acactttgag aggctgaggc gggcggatca cctgagtcag gagttcgaga 1150  
 ccagcctggc caacatggtg aaacctccgt ctctattaaa aatacaaaaa 1200  
 ttagccgaga gtggtggcat gcacctgtca tccagctac tcgggagggt 1250  
 gaggcaggag aatcgcttga acccgggagg cagaggttgc agtgagccga 1300  
 gatcgcgcca ctgcactcca acctgggtga cagactctgt ctccaaaaca 1350  
 aaacaaacaa acaaaaagat ttattaaag atatttgggt aactc 1395

<210> 10

<211> 321

<212> PRT

<213> Homo Sapien

<400> 10

Arg	Thr	Arg	Gly	Arg	Thr	Arg	Gly	Gly	Cys	Glu	Lys	Val	Pro	Ile
1		5		10				15						

Asn	Thr	Ser	Cys	Asn	Pro	Thr	Ala	His	Leu	Val	Asn	Ser	Ser	Cys
	20			25				30						

# Sequence Listing - P3230R1C1.txt

Pro Gly Leu Met Cys Val Phe Gln Gly Tyr Ser Ser Lys Gly Leu  
 35 40 45  
 Ile Gln Arg Ser Val Phe Asn Leu Gln Ile Tyr Gly Val Leu Gly  
 50 55 60  
 Leu Phe Trp Thr Leu Asn Trp Val Leu Ala Leu Gly Gln Cys Val  
 65 70 75  
 Leu Ala Gly Ala Phe Ala Ser Phe Tyr Trp Ala Phe His Lys Pro  
 80 85 90  
 Gln Asp Ile Pro Thr Phe Pro Leu Ile Ser Ala Phe Ile Arg Thr  
 95 100 105  
 Leu Arg Tyr His Thr Gly Ser Leu Ala Phe Gly Ala Leu Ile Leu  
 110 115 120  
 Thr Leu Val Gln Ile Ala Arg Val Ile Leu Glu Tyr Ile Asp His  
 125 130 135  
 Lys Leu Arg Gly Val Gln Asn Pro Val Ala Arg Cys Ile Met Cys  
 140 145 150  
 Cys Phe Lys Cys Cys Leu Trp Cys Leu Glu Lys Phe Ile Lys Phe  
 155 160 165  
 Leu Asn Arg Asn Ala Tyr Ile Met Ile Ala Ile Tyr Gly Lys Asn  
 170 175 180  
 Phe Cys Val Ser Ala Lys Asn Ala Phe Met Leu Leu Met Arg Asn  
 185 190 195  
 Ile Val Arg Val Val Val Leu Asp Lys Val Thr Asp Leu Leu Leu  
 200 205 210  
 Phe Phe Gly Lys Leu Leu Val Val Gly Gly Val Gly Val Leu Ser  
 215 220 225  
 Phe Phe Phe Phe Ser Gly Arg Ile Pro Gly Leu Gly Lys Asp Phe  
 230 235 240  
 Lys Ser Pro His Leu Asn Tyr Tyr Trp Leu Pro Ile Met Thr Ser  
 245 250 255  
 Ile Leu Gly Ala Tyr Val Ile Ala Ser Gly Phe Phe Ser Val Phe  
 260 265 270  
 Gly Met Cys Val Asp Thr Leu Phe Leu Cys Phe Leu Glu Asp Leu  
 275 280 285  
 Glu Arg Asn Asn Gly Ser Leu Asp Arg Pro Tyr Tyr Met Ser Lys  
 290 295 300  
 Ser Leu Leu Lys Ile Leu Gly Lys Lys Asn Glu Ala Pro Pro Asp

Sequence Listing - P3230R1C1.txt

305

310

315

Asn Lys Lys Arg Lys Lys  
320

<210> 11

<211> 1901

<212> DNA

<213> Homo Sapien

<400> 11

gccccgcgcc cggcgccggg cgccgaagc cgggagccac cgccatgggg 50

gcctgcctgg gagcctgctc cctgctcagc tgcgcgtcct gcctctgcgg 100

ctctgcccc tgcctcctgt gcagctgctg ccccgccagc cgcaactcca 150

ccgtgagccg cctcatcttc acgttcttcc tcttctggg ggtgctgggtg 200

tccatcatta tgctgagccc gggcgtggag agtcagctct acaagctgcc 250

ctgggtgtgt gaggaggggg ccgggatccc caccgtcctg cagggccaca 300

tcgactgtgg ctccctgctt ggctaccgcg ctgtctaccg catgtgcttc 350

gccacggcgg ctttcttctt cttcttttc accctgctca tgctctgcgt 400

gagcagcagc cgggaccccc gggctgccat ccagaatggg ttttggttct 450

ttaagttct gatcctgggtg ggcctaccg tgggtgcctt ctacatccct 500

gacggctcct tcaccaacat ctggttctac ttcggcgtcg tgggctcctt 550

cctcttcac ctcaccagc tgggtgctgt catcgacttt gcgcactcct 600

ggaaccagcg gtggctgggc aaggccgagg agtgcgattc ccgtgcctgg 650

tacgcaggcc tcttcttctt cactctctc ttctacttgc tgcgatcgc 700

ggccgtggcg ctgatgttca tgtactacac tgagcccagc ggctgccacg 750

agggcaaggt cttcatcagc ctcaacctca cttctgtgt ctgcgtgtcc 800

atcgctgctg tcctgcccac ggtccaggac gccagccca actcgggtct 850

gctgcaggcc tcggtcatca cctctacac catgtttgtc acctggtcag 900

ccctatccag tatccctgaa cagaaatgca accccattt gccaaccag 950

ctgggcaacg agacagttgt ggcaggcccc gagggctatg agaccagtg 1000

gtgggatgcc ccgagcattg tgggcctcat catcttctc ctgtgcacc 1050

tcttcacag tctgcgtcc tcagaccacc ggcagggtgaa cagcctgatg 1100

cagaccgagg agtgcccacc tatgctagac gccacacagc agcagcagca 1150

Sequence Listing - P3230R1C1.txt

gcagggtggca gcctgtgagg gccgggcctt tgacaacgag caggacggcg 1200  
 tcacctacag ctactccttc ttccacttct gcctggtgct ggcctcactg 1250  
 cactgatga tgacgtcac caactggtac aagcccgggtg agaccggaa 1300  
 gatgatcagc acgtggaccg ccgtgtgggt gaagatctgt gccagctggg 1350  
 cagggtgct cctctacctg tggaccctgg tagcccccact cctcctgcgc 1400  
 aaccgcgact tcagctgagg cagcctcaca gcctgccatc tggcgcctcc 1450  
 tgccacctgg tgctctcgg ctcggtgaca gccaacctgc ccctcccca 1500  
 caccaatcag ccaggctgag cccccacccc tgcccagct ccaggacctg 1550  
 ccctgagcc gggccttcta gtcgtagtgc cttcaggggc cgaggagcat 1600  
 caggctcctg cagagcccca tcccccgcc acaccacac ggtggagctg 1650  
 cctcttctt cccctcctc ctgttgcca tactcagcat ctcggatgaa 1700  
 agggctcctt tgcctcagg ctccacggga gcggggctgc tggagagagc 1750  
 ggggaactcc caccacagtg gggcatccgg cactgaagcc ctggtgttcc 1800  
 tggtcacgtc cccagggga cctgcccc ttctggact tcgtgcctta 1850  
 ctgagtctt aagactttt ctaataaaca agccagtgcg tgtaaaaaa 1900

a 1901

<210> 12

<211> 457

<212> PRT

<213> Homo Sapien

<400> 12

Met Gly Ala Cys Leu Gly Ala Cys Ser Leu Leu Ser Cys Ala Ser  
 1 5 10 15

Cys Leu Cys Gly Ser Ala Pro Cys Ile Leu Cys Ser Cys Cys Pro  
 20 25 30

Ala Ser Arg Asn Ser Thr Val Ser Arg Leu Ile Phe Thr Phe Phe  
 35 40 45

Leu Phe Leu Gly Val Leu Val Ser Ile Ile Met Leu Ser Pro Gly  
 50 55 60

Val Glu Ser Gln Leu Tyr Lys Leu Pro Trp Val Cys Glu Glu Gly  
 65 70 75

Ala Gly Ile Pro Thr Val Leu Gln Gly His Ile Asp Cys Gly Ser



Sequence Listing - P3230R1C1.txt

80	85	90
Leu Leu Gly Tyr Arg Ala Val Tyr Arg Met Cys Phe Ala Thr Ala		
95	100	105
Ala Phe Phe Phe Phe Phe Phe Thr Leu Leu Met Leu Cys Val Ser		
110	115	120
Ser Ser Arg Asp Pro Arg Ala Ala Ile Gln Asn Gly Phe Trp Phe		
125	130	135
Phe Lys Phe Leu Ile Leu Val Gly Leu Thr Val Gly Ala Phe Tyr		
140	145	150
Ile Pro Asp Gly Ser Phe Thr Asn Ile Trp Phe Tyr Phe Gly Val		
155	160	165
Val Gly Ser Phe Leu Phe Ile Leu Ile Gln Leu Val Leu Leu Ile		
170	175	180
Asp Phe Ala His Ser Trp Asn Gln Arg Trp Leu Gly Lys Ala Glu		
185	190	195
Glu Cys Asp Ser Arg Ala Trp Tyr Ala Gly Leu Phe Phe Phe Thr		
200	205	210
Leu Leu Phe Tyr Leu Leu Ser Ile Ala Ala Val Ala Leu Met Phe		
215	220	225
Met Tyr Tyr Thr Glu Pro Ser Gly Cys His Glu Gly Lys Val Phe		
230	235	240
Ile Ser Leu Asn Leu Thr Phe Cys Val Cys Val Ser Ile Ala Ala		
245	250	255
Val Leu Pro Lys Val Gln Asp Ala Gln Pro Asn Ser Gly Leu Leu		
260	265	270
Gln Ala Ser Val Ile Thr Leu Tyr Thr Met Phe Val Thr Trp Ser		
275	280	285
Ala Leu Ser Ser Ile Pro Glu Gln Lys Cys Asn Pro His Leu Pro		
290	295	300
Thr Gln Leu Gly Asn Glu Thr Val Val Ala Gly Pro Glu Gly Tyr		
305	310	315
Glu Thr Gln Trp Trp Asp Ala Pro Ser Ile Val Gly Leu Ile Ile		
320	325	330
Phe Leu Leu Cys Thr Leu Phe Ile Ser Leu Arg Ser Ser Asp His		
335	340	345
Arg Gln Val Asn Ser Leu Met Gln Thr Glu Glu Cys Pro Pro Met		
350	355	360

Sequence Listing - P3230R1C1.txt

Leu Asp Ala Thr Gln Gln Gln Gln Gln Val Ala Ala Cys Glu  
365 370 375

Gly Arg Ala Phe Asp Asn Glu Gln Asp Gly Val Thr Tyr Ser Tyr  
380 385 390

Ser Phe Phe His Phe Cys Leu Val Leu Ala Ser Leu His Val Met  
395 400 405

Met Thr Leu Thr Asn Trp Tyr Lys Pro Gly Glu Thr Arg Lys Met  
410 415 420

Ile Ser Thr Trp Thr Ala Val Trp Val Lys Ile Cys Ala Ser Trp  
425 430 435

Ala Gly Leu Leu Leu Tyr Leu Trp Thr Leu Val Ala Pro Leu Leu  
440 445 450

Leu Arg Asn Arg Asp Phe Ser  
455

<210> 13

<211> 1572

<212> DNA

<213> Homo Sapien

<400> 13

cgggccagcc tggggcggcc ggccaggaac caccggttaa ggtgtcttct 50

cttagggat ggtgaggttg gaaaaagact cctgtaacct tcttcagga 100

tgaaccacct gccagaagac atggagaacg ctctaccgg gagccagagc 150

tcccatgctt ctctgcgcaa tatccattcc atcaaccca cacaactcat 200

ggccaggatt gagtctatg aaggaaggga aaagaaaggc atatctgatg 250

tcaggaggac ttctgtttg ttgtcacct ttgacctt attcgtaaca 300

ttactgtgga taatagagtt aaatgtgaat ggaggcattg agaacacatt 350

agagaaggag gtgatgcagt atgactacta ttctcatat ttgatatat 400

ttcttctggc agtttttcga tttaaagtgt taatacttgc atatgctgtg 450

tgcagactgc gccattggtg ggcaatagcg ttgacaacgg cagtgaccag 500

tgccttttta ctagcaaaag tgatccttc gaagctttc tctcaagggg 550

cttttggtta tgtgctgcc atcatctcat tcaccttgc ctggattgag 600

acgtggttcc tggatttcaa agtgttacct caagaagcag aagaagaaaa 650

cagactctg atagttcagg atgcttcaga gagggcagca cttatacctg 700

# Sequence Listing - P3230R1C1.txt

gtggtctttc tgatggtcag tttattccc ctctgaatc cgaagcagga 750  
tctgaagaag ctgaagaaaa acaggacagt gagaaaccac ttttagaact 800  
atgagtacta cttttgttaa atgtgaaaaa ccctcacaga aagtcacga 850  
ggcaaaaaga ggcaggcagt ggagtcctcc tgtcgacagt aaagttgaaa 900  
tggtgacgtc cactgctggc ttattgaac agctaataa gatttattta 950  
ttgtaatacc tcacaaacgt tgtaccatat ccatgcacat ttagttgcct 1000  
gcctgtggct ggtaaggtaa tgtcatgatt catcctctct tcagtgagac 1050  
tgagcctgat gtgttaacaa atagggtgaag aaagtcttgt gctgtattcc 1100  
taatcaaaag acttaataata ttgaagtaac acttttttag taagcaagat 1150  
accttttat ttcaattcac agaattggaat tttttgttt catgtctcag 1200  
atttattttg tatttctttt ttaacactct acatttcct tgtttttaa 1250  
ctcatgcaca tgtgctcttt gtacagtttt aaaaagtga ataaatctg 1300  
acatgtcaat gtggctagtt ttattttct tgttttgcac tatgtgtatg 1350  
gcctgaagtg ttggacttgc aaaaggggaa gaaaggaatt gcgaatacat 1400  
gtaaaatgtc accagacatt tgtattattt ttatcatgaa atcatgtttt 1450  
tctctgattg ttctgaaatg ttctaaatac tcttattttg aatgcacaaa 1500  
atgacttaaa ccattcatat catgtttcct ttgcgttcag ccaatttcaa 1550  
ttaaaatgaa ctaaattaaa aa 1572

<210> 14

<211> 234

<212> PRT

<213> Homo Sapien

<400> 14

Met Asn His Leu Pro Glu Asp Met Glu Asn Ala Leu Thr Gly Ser  
1 5 10 15

Gln Ser Ser His Ala Ser Leu Arg Asn Ile His Ser Ile Asn Pro  
20 25 30

Thr Gln Leu Met Ala Arg Ile Glu Ser Tyr Glu Gly Arg Glu Lys  
35 40 45

Lys Gly Ile Ser Asp Val Arg Arg Thr Phe Cys Leu Phe Val Thr  
50 55 60

Phe Asp Leu Leu Phe Val Thr Leu Leu Trp Ile Ile Glu Leu Asn

Sequence Listing - P3230R1C1.txt

65	70	75
Val Asn Gly Gly Ile Glu Asn Thr Leu Glu Lys Glu Val Met Gln		
80	85	90
Tyr Asp Tyr Tyr Ser Ser Tyr Phe Asp Ile Phe Leu Leu Ala Val		
95	100	105
Phe Arg Phe Lys Val Leu Ile Leu Ala Tyr Ala Val Cys Arg Leu		
110	115	120
Arg His Trp Trp Ala Ile Ala Leu Thr Thr Ala Val Thr Ser Ala		
125	130	135
Phe Leu Leu Ala Lys Val Ile Leu Ser Lys Leu Phe Ser Gln Gly		
140	145	150
Ala Phe Gly Tyr Val Leu Pro Ile Ile Ser Phe Ile Leu Ala Trp		
155	160	165
Ile Glu Thr Trp Phe Leu Asp Phe Lys Val Leu Pro Gln Glu Ala		
170	175	180
Glu Glu Glu Asn Arg Leu Leu Ile Val Gln Asp Ala Ser Glu Arg		
185	190	195
Ala Ala Leu Ile Pro Gly Gly Leu Ser Asp Gly Gln Phe Tyr Ser		
200	205	210
Pro Pro Glu Ser Glu Ala Gly Ser Glu Glu Ala Glu Glu Lys Gln		
215	220	225
Asp Ser Glu Lys Pro Leu Leu Glu Leu		
230		

<210> 15

<211> 2768

<212> DNA

<213> Homo Sapien

<400> 15

actcgaacgc agttgcttcg ggaccagga cccctcggg cccgaccgc 50

caggaaagac tgaggccgcg gcctgcccc cccggctccc tgcgccgccg 100

ccgcctcccg ggacagaaga tgtgtccag ggtccctctg ctgctgccgc 150

tgctcctgct actggccctg gggcctgggg tgcagggctg cccatccggc 200

tgccagtgca gccagccaca gacagtcttc tgactgccc gccagggggac 250

cacggtgccc cgagacgtgc caccgacac ggtggggctg tacgtctttg 300

agaacggcat caccatgctc gacgcaggca gctttgccgg cctgccgggc 350

Sequence Listing - P3230R1C1.txt

ctgcagctcc tggacctgtc acagaaccag atcgccagcc tgcccagcgg 400  
ggctttccag cactcgcca acctcagcaa cctggacctg acggccaaca 450  
ggctgcatga aatcaccaat gagaccttcc gtggcctgcg gcgcctcgag 500  
cgctctacc tgggcaagaa ccgcatccgc cacatccagc ctggtgcctt 550  
cgacacgctc gaccgcctcc tggagctcaa gctgcaggac aacgagctgc 600  
gggcactgcc cccgctgcg ctgccccgcc tgctgtgct ggacctcagc 650  
cacaacagcc tcttggcctt ggagcccggc atcctggaca ctgccaacgt 700  
ggaggcgctg cggctggctg gtctggggct gcagcagctg gacgaggggc 750  
tcttcagccg cttgcgcaac ctccacgacc tggatgtgtc cgacaaccag 800  
ctggagcgag tgccacctgt gatccgaggc ctccggggcc tgacgcgcct 850  
gcggctggcc ggcaacaccc gcattgccca gctgcggccc gaggacctgg 900  
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gccctgctg gcgacctctc gggcctcttc ccccgctgc ggctgtggc 1000  
agctgccgc aacccttca actgcgtgtg cccctgagc tggtttgcc 1050  
cctgggtgcg cgagagccac gtcacactgg ccagccctga ggagacgcgc 1100  
tgccacttcc cgccaagaa cgctggccgg ctgctctgg agcttgacta 1150  
cgccgacttt ggctgcccag ccaccaccac cacagccaca gtgcccacca 1200  
cgaggcccgt ggtgcgggag cccacagcct tgtttctag cttggctcct 1250  
acctggctta gcccacagc gccggccact gaggcccca gccgcctc 1300  
cactgcccc cagactgtag ggctgtccc ccagcccag gactgcccac 1350  
cgtccactg cctcaatggg ggcacatgcc acctggggac acggcaccac 1400  
ctggcgctgct tgtgccccga aggcttcag ggctgtact gtgagagcca 1450  
gatggggcag gggacacggc ccagccctac accagtcacg ccgaggccac 1500  
cacggtcctt gacctgggc atcgagccgg tgagcccccac ctccctgcgc 1550  
gtggggctgc agcgctacct ccaggggagc tccgtgcagc tcaggagcct 1600  
ccgtctcacc tatcgcaacc tatcggggcc tgataagcgg ctggtgacgc 1650  
tgcgactgcc tgctcgctc gctgagtaca cggtcaccca gctgcggccc 1700  
aacgccactt actcgtctg tgtcatgcct ttggggcccg ggcgggtgcc 1750

Sequence Listing - P3230R1C1.txt

ggagggcgag gaggcctgcg gggaggccca tacaccccca gccgtccact 1800  
 ccaaccacgc ccagtcacc caggcccgcg agggcaacct gccgctctc 1850  
 attgcgcccg ccctggccgc ggtgctcctg gccgcgctgg ctgcggtggg 1900  
 ggcagcctac tgtgtgctgc gggggcgggc catggcagca gcggctcagg 1950  
 acaaagggca ggtggggcca ggggctgggc ccctggaact ggagggagtg 2000  
 aaggtcccct tggagccagg cccgaaggca acagagggcg gtggagaggc 2050  
 cctgcccagc ggggtctgagt gtgaggtgcc actcatgggc ttcccagggc 2100  
 ctggcctcca gtcacccctc cagcaaagc cctacatcta agccagagag 2150  
 agacagggca gctggggccg ggctctcagc cagtgagatg gccagcccc 2200  
 tcctgctgcc acaccacgta agttctcagt cccaacctcg gggatgtgtg 2250  
 cagacagggc tgtgtgacca cagctgggcc ctgttccctc tggacctcgg 2300  
 tctcctatc tgtgagatgc tgtggcccag ctgacgagcc ctaacgtccc 2350  
 cagaaccgag tgcctatgag gacagtgtcc gccctgccct ccgcaacgtg 2400  
 cagtccttgg gcacggcggg ccctgccatg tgctggtaac gcatgcctgg 2450  
 gtctgtctgg gctctccac tccaggcgga ccctgggggc cagtgaagga 2500  
 agctcccgga aagagcagag ggagagcggg taggcggctg tgtgactcta 2550  
 gtcttgcccc caggaagcga aggaacaaaa gaaactggaa aggaagatgc 2600  
 tttaggaaca tgtttgcct ttttaaata tatatatta taagatatcc 2650  
 tttccattt attctgggaa gatgttttc aaactcagag acaaggactt 2700  
 tggttttgt aagacaaacg atgatatgaa ggcctttgt aagaaaaaat 2750  
 aaaagatgaa gtgtgaaa 2768

<210> 16

<211> 673

<212> PRT

<213> Homo Sapien

<400> 16

Met Cys Ser Arg Val Pro Leu Leu Leu Pro Leu Leu Leu Leu

1 5 10 15

Ala Leu Gly Pro Gly Val Gln Gly Cys Pro Ser Gly Cys Gln Cys

20 25 30

Sequence Listing - P3230R1C1.txt

Ser Gln Pro Gln Thr Val Phe Cys Thr Ala Arg Gln Gly Thr Thr  
35 40 45

Val Pro Arg Asp Val Pro Pro Asp Thr Val Gly Leu Tyr Val Phe  
50 55 60

Glu Asn Gly Ile Thr Met Leu Asp Ala Gly Ser Phe Ala Gly Leu  
65 70 75

Pro Gly Leu Gln Leu Leu Asp Leu Ser Gln Asn Gln Ile Ala Ser  
80 85 90

Leu Pro Ser Gly Val Phe Gln Pro Leu Ala Asn Leu Ser Asn Leu  
95 100 105

Asp Leu Thr Ala Asn Arg Leu His Glu Ile Thr Asn Glu Thr Phe  
110 115 120

Arg Gly Leu Arg Arg Leu Glu Arg Leu Tyr Leu Gly Lys Asn Arg  
125 130 135

Ile Arg His Ile Gln Pro Gly Ala Phe Asp Thr Leu Asp Arg Leu  
140 145 150

Leu Glu Leu Lys Leu Gln Asp Asn Glu Leu Arg Ala Leu Pro Pro  
155 160 165

Leu Arg Leu Pro Arg Leu Leu Leu Leu Asp Leu Ser His Asn Ser  
170 175 180

Leu Leu Ala Leu Glu Pro Gly Ile Leu Asp Thr Ala Asn Val Glu  
185 190 195

Ala Leu Arg Leu Ala Gly Leu Gly Leu Gln Gln Leu Asp Glu Gly  
200 205 210

Leu Phe Ser Arg Leu Arg Asn Leu His Asp Leu Asp Val Ser Asp  
215 220 225

Asn Gln Leu Glu Arg Val Pro Pro Val Ile Arg Gly Leu Arg Gly  
230 235 240

Leu Thr Arg Leu Arg Leu Ala Gly Asn Thr Arg Ile Ala Gln Leu  
245 250 255

Arg Pro Glu Asp Leu Ala Gly Leu Ala Ala Leu Gln Glu Leu Asp  
260 265 270

Val Ser Asn Leu Ser Leu Gln Ala Leu Pro Gly Asp Leu Ser Gly  
275 280 285

Leu Phe Pro Arg Leu Arg Leu Leu Ala Ala Ala Arg Asn Pro Phe  
290 295 300

Asn Cys Val Cys Pro Leu Ser Trp Phe Gly Pro Trp Val Arg Glu

Sequence Listing - P3230R1C1.txt

305	310	315
Ser His Val Thr Leu Ala	Ser Pro Glu Glu Thr Arg Cys His Phe	
320	325	330
Pro Pro Lys Asn Ala Gly Arg Leu Leu Leu Glu Leu Asp Tyr Ala		
335	340	345
Asp Phe Gly Cys Pro Ala Thr Thr Thr Thr Ala Thr Val Pro Thr		
350	355	360
Thr Arg Pro Val Val Arg Glu Pro Thr Ala Leu Ser Ser Ser Leu		
365	370	375
Ala Pro Thr Trp Leu Ser Pro Thr Ala Pro Ala Thr Glu Ala Pro		
380	385	390
Ser Pro Pro Ser Thr Ala Pro Pro Thr Val Gly Pro Val Pro Gln		
395	400	405
Pro Gln Asp Cys Pro Pro Ser Thr Cys Leu Asn Gly Gly Thr Cys		
410	415	420
His Leu Gly Thr Arg His His Leu Ala Cys Leu Cys Pro Glu Gly		
425	430	435
Phe Thr Gly Leu Tyr Cys Glu Ser Gln Met Gly Gln Gly Thr Arg		
440	445	450
Pro Ser Pro Thr Pro Val Thr Pro Arg Pro Pro Arg Ser Leu Thr		
455	460	465
Leu Gly Ile Glu Pro Val Ser Pro Thr Ser Leu Arg Val Gly Leu		
470	475	480
Gln Arg Tyr Leu Gln Gly Ser Ser Val Gln Leu Arg Ser Leu Arg		
485	490	495
Leu Thr Tyr Arg Asn Leu Ser Gly Pro Asp Lys Arg Leu Val Thr		
500	505	510
Leu Arg Leu Pro Ala Ser Leu Ala Glu Tyr Thr Val Thr Gln Leu		
515	520	525
Arg Pro Asn Ala Thr Tyr Ser Val Cys Val Met Pro Leu Gly Pro		
530	535	540
Gly Arg Val Pro Glu Gly Glu Glu Ala Cys Gly Glu Ala His Thr		
545	550	555
Pro Pro Ala Val His Ser Asn His Ala Pro Val Thr Gln Ala Arg		
560	565	570
Glu Gly Asn Leu Pro Leu Leu Ile Ala Pro Ala Leu Ala Ala Val		
575	580	585



Sequence Listing - P3230R1C1.txt

Leu Leu Ala Ala Leu Ala Ala Val Gly Ala Ala Tyr Cys Val Arg  
590 595 600

Arg Gly Arg Ala Met Ala Ala Ala Ala Gln Asp Lys Gly Gln Val  
605 610 615

Gly Pro Gly Ala Gly Pro Leu Glu Leu Glu Gly Val Lys Val Pro  
620 625 630

Leu Glu Pro Gly Pro Lys Ala Thr Glu Gly Gly Gly Glu Ala Leu  
635 640 645

Pro Ser Gly Ser Glu Cys Glu Val Pro Leu Met Gly Phe Pro Gly  
650 655 660

Pro Gly Leu Gln Ser Pro Leu His Ala Lys Pro Tyr Ile  
665 670

<210> 17

<211> 1672

<212> DNA

<213> Homo Sapien

<400> 17

gcagcggcga ggcggcgggtg gtggctgagt ccgtggtggc agaggcgaag 50

gcgacagctc atcggggtcc ggatagggtc gacgtgctg ctgtgtgcgg 100

tgctgctgag ctggcctcg gcgtcctcg atgaagaagg cagccaggat 150

gaatccttag attccaagac tactttgaca tcagatgagt cagtaaagga 200

ccatactact gcaggcagag tagttgctgg tcaaatattt ctgattcag 250

aagaatctga attagaatcc tctattcaag aagaggaaga cagcctcaag 300

agccaagagg gggaaagtgt cacagaagat atcagctttc tagagtctcc 350

aatccagaa aacaaggact atgaagagcc aaagaaagta cggaaccag 400

cttgaccgc cattgaaggc acagcacatg gggagccctg ccacttcct 450

tttctttcc tagataagga gtatgatgaa tgtacatcag atgggagggg 500

agatggcaga ctgtggtgtg ctacaaccta tgactacaaa gcagatgaaa 550

agtggggctt ttgtgaaact gaagaagagg ctgctaagag acggcagatg 600

caggaagcag aatgatgta tcaactgga atgaaaatcc ttaatggaag 650

caataagaaa agccaaaaaa gagaagcata tcggtatctc caaaaggcag 700

caagcatgaa ccataccaaa gccctggaga gagtgtcata tgctcttta 750

tttggtgatt acttgccaca gaatatccag gcagcgagag agatgtttga 800

Sequence Listing - P3230R1C1.txt

gaagctgact gaggaaggct ctccaaggg acagactgct cttggctttc 850  
 tgtatgcctc tggacttggg gtaattcaa gtcaggcaaa ggctcttgta 900  
 tattatacat ttggagctct tgggggcaat ctaatagccc acatgggttt 950  
 ggtaagtaga ctttagtgga aggctaataa tattaacatc agaagaattt 1000  
 gtgggtttata gcggccacaa cttttcagc tttcatgac cagatttgct 1050  
 tgtattaaga ccaaatattc agttgaactt cttcaaatt cttgttaatg 1100  
 gatataacac atggaatcta catgtaaatg aaagttgggtg gagtcacaa 1150  
 tttttcttta aatgattag ttggctgat tgcccctaaa aagagagatc 1200  
 tgataaatgg ctcttttta attttctctg agttggaatt gtcagaatca 1250  
 tttttacat tagattatca taattttaaa aatttttctt tagttttca 1300  
 aaattttgta aatgggtggct atagaaaaac aacatgaaat attatacaat 1350  
 attttgcaac aatgccctaa gaattgttaa aattcatgga gttatttggtg 1400  
 cagaatgact ccagagagct ctactttctg tttttactt ttcattgattg 1450  
 gctgtcttcc catttattct ggtcatttat tgctagtgc actgtgcctg 1500  
 cttccagtag tctcattttc cctattttgc taatttgta cttttcttt 1550  
 gctaatttgg aagattaact catttttaaa aaaattatgt ctaagattaa 1600  
 aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 1650  
 aaaaaaaaaa aaaaaaaaaa aa 1672

<210> 18  
 <211> 301  
 <212> PRT  
 <213> Homo Sapien

<400> 18  
 Met Arg Val Arg Ile Gly Leu Thr Leu Leu Cys Ala Val Leu  
 1 5 10 15  
 Leu Ser Leu Ala Ser Ala Ser Ser Asp Glu Glu Gly Ser Gln Asp  
 20 25 30  
 Glu Ser Leu Asp Ser Lys Thr Thr Leu Thr Ser Asp Glu Ser Val  
 35 40 45  
 Lys Asp His Thr Thr Ala Gly Arg Val Val Ala Gly Gln Ile Phe  
 50 55 60  
 Leu Asp Ser Glu Glu Ser Glu Leu Glu Ser Ser Ile Gln Glu Glu

Sequence Listing - P3230R1C1.txt

65	70	75
Glu Asp Ser Leu Lys Ser Gln Glu Gly Glu Ser Val Thr Glu Asp		
80	85	90
Ile Ser Phe Leu Glu Ser Pro Asn Pro Glu Asn Lys Asp Tyr Glu		
95	100	105
Glu Pro Lys Lys Val Arg Lys Pro Ala Leu Thr Ala Ile Glu Gly		
110	115	120
Thr Ala His Gly Glu Pro Cys His Phe Pro Phe Leu Phe Leu Asp		
125	130	135
Lys Glu Tyr Asp Glu Cys Thr Ser Asp Gly Arg Glu Asp Gly Arg		
140	145	150
Leu Trp Cys Ala Thr Thr Tyr Asp Tyr Lys Ala Asp Glu Lys Trp		
155	160	165
Gly Phe Cys Glu Thr Glu Glu Glu Ala Ala Lys Arg Arg Gln Met		
170	175	180
Gln Glu Ala Glu Met Met Tyr Gln Thr Gly Met Lys Ile Leu Asn		
185	190	195
Gly Ser Asn Lys Lys Ser Gln Lys Arg Glu Ala Tyr Arg Tyr Leu		
200	205	210
Gln Lys Ala Ala Ser Met Asn His Thr Lys Ala Leu Glu Arg Val		
215	220	225
Ser Tyr Ala Leu Leu Phe Gly Asp Tyr Leu Pro Gln Asn Ile Gln		
230	235	240
Ala Ala Arg Glu Met Phe Glu Lys Leu Thr Glu Glu Gly Ser Pro		
245	250	255
Lys Gly Gln Thr Ala Leu Gly Phe Leu Tyr Ala Ser Gly Leu Gly		
260	265	270
Val Asn Ser Ser Gln Ala Lys Ala Leu Val Tyr Tyr Thr Phe Gly		
275	280	285
Ala Leu Gly Gly Asn Leu Ile Ala His Met Val Leu Val Ser Arg		
290	295	300

Leu

<210> 19  
 <211> 1508  
 <212> DNA  
 <213> Homo Sapien

Sequence Listing - P3230R1C1.txt

<400> 19

aattcagatt ttaagcccat tctgcagtgg aatttcatga actagcaaga 50  
ggacaccatc ttcttgatt atacaagaaa ggagtgtacc tatcacacac 100  
agggggaaaa atgctctttt ggggtgctagg cctcctaadc ctctgtggtt 150  
ttctgtggac tcgtaaagga aaactaaaga ttgaagacat cactgataag 200  
tacattttta tctctggatg tgactcgggc ttggaaaact tggcagccag 250  
aacttttgat aaaaagggat ttcattgaat cgctgcctgt ctgactgaat 300  
caggatcaac agctttaag gcagaaacct cagagagact tcgtactgtg 350  
cttctggatg tgaccgaccc agagaatgac aagaggactg cccagtgggt 400  
gaagaaccaa gttggggaga aaggctctg gggctgac aataatgctg 450  
gtgttcccg cgctgtggct cccactgact ggctgacact agaggactac 500  
agagaacctt ttgaagtga cctgtttgga ctcatcagtg tgacactaaa 550  
tatgtctcct ttgtcaaga aagctcaagg gagagttatt aatgtctcca 600  
gtgttgagg tcgcttgca atcgttgag ggggtatata tccatccaaa 650  
tatgcagtgg aaggtttcaa tgacagctta agacgggaca tgaaagcttt 700  
tggtgtgcac gtctcatgca ttgaaccagg attgtcaaa acaaactgg 750  
cagatccagt aaaggtaatt gaaaaaaaaac tcgccatttg ggagcagctg 800  
tctccagaca tcaacaaca atatggagaa ggttacattg aaaaaagtct 850  
agacaaactg aaaggcaata aatcctatgt gaacatggac ctctctccg 900  
tggtagagtg catggaccac gctctaaca gtctctccc taagactcat 950  
tatgccgctg gaaaagatgc caaaatttc tggatacctc tgtctcat 1000  
gccagcagct ttgaagact tttattgtt gaaacagaaa gcagagctgg 1050  
ctaattccaa ggcagtgtga ctgagctaac cacaatgtc tctccaggc 1100  
tatgaaattg gccgatttca agaacacatc tcctttcaa cccattcct 1150  
tatctgctcc aacctggact catttagatc gtgcttattt ggattgcaa 1200  
agggagtccc accatcgctg gtggtatccc agggctcctg ctcaagttt 1250  
ctttgaaaag gagggctgga atgttacatc acataggcaa gtctgcct 1300  
gtatttaggc ttgcctgct tgggtgatg taagggaat tgaaagactt 1350

Sequence Listing - P3230R1C1.txt

gcccattcaa aatgatcttt accgtggcct gcccattgct tatggtcccc 1400

agcattaca gtaacttggt aatgttaagt atcatctctt atctaaatat 1450

taaaagataa gtcaacccaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 1500

aaaaaaaa 1508

<210> 20

<211> 319

<212> PRT

<213> Homo Sapien

<400> 20

Met Leu Phe Trp Val Leu Gly Leu Leu Ile Leu Cys Gly Phe Leu  
1 5 10 15

Trp Thr Arg Lys Gly Lys Leu Lys Ile Glu Asp Ile Thr Asp Lys  
20 25 30

Tyr Ile Phe Ile Thr Gly Cys Asp Ser Gly Phe Gly Asn Leu Ala  
35 40 45

Ala Arg Thr Phe Asp Lys Lys Gly Phe His Val Ile Ala Ala Cys  
50 55 60

Leu Thr Glu Ser Gly Ser Thr Ala Leu Lys Ala Glu Thr Ser Glu  
65 70 75

Arg Leu Arg Thr Val Leu Leu Asp Val Thr Asp Pro Glu Asn Val  
80 85 90

Lys Arg Thr Ala Gln Trp Val Lys Asn Gln Val Gly Glu Lys Gly  
95 100 105

Leu Trp Gly Leu Ile Asn Asn Ala Gly Val Pro Gly Val Leu Ala  
110 115 120

Pro Thr Asp Trp Leu Thr Leu Glu Asp Tyr Arg Glu Pro Ile Glu  
125 130 135

Val Asn Leu Phe Gly Leu Ile Ser Val Thr Leu Asn Met Leu Pro  
140 145 150

Leu Val Lys Lys Ala Gln Gly Arg Val Ile Asn Val Ser Ser Val  
155 160 165

Gly Gly Arg Leu Ala Ile Val Gly Gly Gly Tyr Thr Pro Ser Lys  
170 175 180

Tyr Ala Val Glu Gly Phe Asn Asp Ser Leu Arg Arg Asp Met Lys  
185 190 195

Ala Phe Gly Val His Val Ser Cys Ile Glu Pro Gly Leu Phe Lys  
200 205 210

Sequence Listing - P3230R1C1.txt

Thr Asn Leu Ala Asp Pro Val Lys Val Ile Glu Lys Lys Leu Ala  
215 220 225

Ile Trp Glu Gln Leu Ser Pro Asp Ile Lys Gln Gln Tyr Gly Glu  
230 235 240

Gly Tyr Ile Glu Lys Ser Leu Asp Lys Leu Lys Gly Asn Lys Ser  
245 250 255

Tyr Val Asn Met Asp Leu Ser Pro Val Val Glu Cys Met Asp His  
260 265 270

Ala Leu Thr Ser Leu Phe Pro Lys Thr His Tyr Ala Ala Gly Lys  
275 280 285

Asp Ala Lys Ile Phe Trp Ile Pro Leu Ser His Met Pro Ala Ala  
290 295 300

Leu Gln Asp Phe Leu Leu Leu Lys Gln Lys Ala Glu Leu Ala Asn  
305 310 315

Pro Lys Ala Val

<210> 21

<211> 1849

<212> DNA

<213> Homo Sapien

<400> 21

ctgaggcggc ggtagcatgg agggggagag tacgtcggcg gtgctctcgg 50

gctttgtgct cggcgcactc gctttccagc acctcaacac ggactcggac 100

acggaagggt ttcttcttgg ggaagtaaaa ggtgaagcca agaacagcat 150

tactgattcc caaatggatg atgttgaagt tgttatatac attgacattc 200

agaaatatat tccatgctat cagcttttta gcttttataa ttcttcaggc 250

gaagtaaatt agcaagcact gaagaaaata ttatcaaatg tcaaaaagaa 300

tgtggtaggt tggtaacaaat tccgtcgtca ttcagatcag atcatgacgt 350

ttagagagag gctgcttcac aaaaacttgc aggagcattt ttcaaaccac 400

gaccttggtt ttctgctatt aacaccaagt ataataacag aaagctgctc 450

tactcatcga ctggaacatt ccttatataa acctcaaaaa ggactttttc 500

acagggtacc ttagtggtt gccaatctgg gcatgtctga acaactgggt 550

tataaaactg tatcagggtc ctgtatgtcc actggtttta gccgagcagt 600

Sequence Listing - P3230R1C1.txt

acaaacacac agctctaaat ttttgaaga agatggatcc ttaaaggagg 650  
tacataagat aatgaaatg tatgcttcat tacaagagga attaaagagt 700  
atatgcaaaa aagtggaaga cagtgaacaa gcagtagata aactagtaaa 750  
ggatgtaaac agattaaaac gagaaattga gaaaaggaga ggagcacaga 800  
ttcaggcagc aagagagaag aacatccaaa aagaccctca ggagaacatt 850  
tttctttgtc aggcatctac gaccttttt ccaaattctg aatttctca 900  
ttcatgtgtt atgtctttaa aaaatagaca tgtttctaaa agtagctgta 950  
actacaacca ccatctcgat gtagtagaca atctgacctt aatggtagaa 1000  
cacactgaca ttctgaagc tagtccagct agtacaccac aaatcattaa 1050  
gcataaagcc ttagacttag atgacagatg gcaattcaag agatctcggg 1100  
tgtagatac acaagacaaa cgatctaaag caaatactgg tagtagtaac 1150  
caagataaag catccaaaat gagcagccca gaaacagatg aagaaattga 1200  
aaagatgaag ggttttggtg aatattcacg gtctcctaca tttgatcct 1250  
tttaacctta caaggagatt tttttattg gctgatgggt aaagccaaac 1300  
atttctattg ttttactat gttgagctac ttgcagtaag ttcattgtt 1350  
tttactatgt tcacctgttt gcagtaatac acagataact cttagtgcatt 1400  
ttacttcaca aagtactttt tcaaacatca gatgctttta tttccaaacc 1450  
ttttttcac ctttactaa gttgttgagg ggaaggctta cacagacaca 1500  
ttcttttagaa ttggaagaat gagaccaggc acagtggctc acacctgtaa 1550  
tcccagcact tagggaagac aagtcaggag gattgattga agctaggagt 1600  
tagagaccag cctgggcaac gtattgagac catgtctatt aaaaaataaa 1650  
atggaaaagc aagaatagcc ttattttcaa aatatggaaa gaaatttata 1700  
tgaaaattta tctgagtcatt taaaattctc cttagtgtat acttttttag 1750  
aagtacatta tggctagagt tgccagataa aatgctggat atcatgcaat 1800  
aaatttgcaa aacatcatct aaaatttaaa aaaaaaaaaa aaaaaaaaaa 1849

<210> 22

<211> 409

<212> PRT

<213> Homo Sapien

Sequence Listing - P3230R1C1.txt

<400> 22

Met Glu Gly Glu Ser Thr Ser Ala Val Leu Ser Gly Phe Val Leu  
1 5 10 15

Gly Ala Leu Ala Phe Gln His Leu Asn Thr Asp Ser Asp Thr Glu  
20 25 30

Gly Phe Leu Leu Gly Glu Val Lys Gly Glu Ala Lys Asn Ser Ile  
35 40 45

Thr Asp Ser Gln Met Asp Asp Val Glu Val Val Tyr Thr Ile Asp  
50 55 60

Ile Gln Lys Tyr Ile Pro Cys Tyr Gln Leu Phe Ser Phe Tyr Asn  
65 70 75

Ser Ser Gly Glu Val Asn Glu Gln Ala Leu Lys Lys Ile Leu Ser  
80 85 90

Asn Val Lys Lys Asn Val Val Gly Trp Tyr Lys Phe Arg Arg His  
95 100 105

Ser Asp Gln Ile Met Thr Phe Arg Glu Arg Leu Leu His Lys Asn  
110 115 120

Leu Gln Glu His Phe Ser Asn Gln Asp Leu Val Phe Leu Leu Leu  
125 130 135

Thr Pro Ser Ile Ile Thr Glu Ser Cys Ser Thr His Arg Leu Glu  
140 145 150

His Ser Leu Tyr Lys Pro Gln Lys Gly Leu Phe His Arg Val Pro  
155 160 165

Leu Val Val Ala Asn Leu Gly Met Ser Glu Gln Leu Gly Tyr Lys  
170 175 180

Thr Val Ser Gly Ser Cys Met Ser Thr Gly Phe Ser Arg Ala Val  
185 190 195

Gln Thr His Ser Ser Lys Phe Phe Glu Glu Asp Gly Ser Leu Lys  
200 205 210

Glu Val His Lys Ile Asn Glu Met Tyr Ala Ser Leu Gln Glu Glu  
215 220 225

Leu Lys Ser Ile Cys Lys Lys Val Glu Asp Ser Glu Gln Ala Val  
230 235 240

Asp Lys Leu Val Lys Asp Val Asn Arg Leu Lys Arg Glu Ile Glu  
245 250 255

Lys Arg Arg Gly Ala Gln Ile Gln Ala Ala Arg Glu Lys Asn Ile  
260 265 270

Gln Lys Asp Pro Gln Glu Asn Ile Phe Leu Cys Gln Ala Leu Arg



Sequence Listing - P3230R1C1.txt

275	280	285
Thr Phe Phe Pro Asn Ser Glu Phe Leu His Ser Cys Val Met Ser		
290	295	300
Leu Lys Asn Arg His Val Ser Lys Ser Ser Cys Asn Tyr Asn His		
305	310	315
His Leu Asp Val Val Asp Asn Leu Thr Leu Met Val Glu His Thr		
320	325	330
Asp Ile Pro Glu Ala Ser Pro Ala Ser Thr Pro Gln Ile Ile Lys		
335	340	345
His Lys Ala Leu Asp Leu Asp Asp Arg Trp Gln Phe Lys Arg Ser		
350	355	360
Arg Leu Leu Asp Thr Gln Asp Lys Arg Ser Lys Ala Asn Thr Gly		
365	370	375
Ser Ser Asn Gln Asp Lys Ala Ser Lys Met Ser Ser Pro Glu Thr		
380	385	390
Asp Glu Glu Ile Glu Lys Met Lys Gly Phe Gly Glu Tyr Ser Arg		
395	400	405
Ser Pro Thr Phe		

<210> 23  
 <211> 2651  
 <212> DNA  
 <213> Homo Sapien

<400> 23  
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 acgagcggac cagcgcaggg cagcccaagc agcgcgcagc gaacgcccgc 100  
 cgccgcccac accctctgcg gtccccgagg cgctgccac ccttcctcc 150  
 ttccccgcgt ccccgctcg ccggccagtc agcttgccgg gtctgctgcc 200  
 ccgcgaaacc ccgaggtcac cagcccgcg cctgtcttc ctgggccgcg 250  
 cgccgctcc acgcccctct tctcccctgg cccggcgctt ggcaccgggg 300  
 accgttgctt gacgcgaggg ccagctctac ttttcgccc gcgtctctc 350  
 cgctgctcg cctcttcac caactccaac tccttctccc tccagctcca 400  
 ctcgtagtc cccgactccg ccagccctcg gcccgctgcc gtagcgccgc 450  
 ttcccgctcg gtcccaaagg tgggaacgcg tccgccccgg ccgcacccat 500

Sequence Listing - P3230R1C1.txt

ggcacgggttc ggcttgcccg cgcttctctg caccctggca gtgctcagcg 550  
ccgcgctgct ggctgccgag ctcaagtcga aaagttgctc ggaagtgcga 600  
cgtctttacg tgtccaaagg cttcaacaag aacgatgccc ccctccacga 650  
gatcaacggg gatcatttga agatctgtcc ccagggttct acctgctgct 700  
ctcaagagat ggaggagaag tacagcctgc aaagtaaaga tgatttcaa 750  
agtgtgggtca gcgaacagt caatcattg caagctgtct ttgcttcacg 800  
ttacaagaag ttgatgaat tcttcaaaga actacttgaa aatgcagaga 850  
aatccctgaa tgatatgttt gtgaagacat atggccattt atacatgcaa 900  
aattctgagc tatttaaga tctcttcgta gagttgaaac gttactacgt 950  
gggtgggaaat gtgaacctgg aagaaatgct aatgacttc tgggctcgcc 1000  
tcctggagcg gatgttcgc ctggtgaact ccagtagca ctttacagat 1050  
gagtatctgg aatgtgtgag caagtatacg gagcagctga agcccttcgg 1100  
agatgtccct cgcaaattga agctccaggt tactcgtgct ttgtagcag 1150  
cccgtacttt cgctcaaggc ttagcggttg cgggagatgt cgtgagcaag 1200  
gtctccgtgg taaacccac agcccagtgt acccatgccc tgttgaagat 1250  
gatctactgc tccactgcc ggggtctcgt gactgtgaag ccatgttaca 1300  
actactgctc aaacatcatg agaggctggt tggccaacca aggggatctc 1350  
gattttgaat ggaacaattt catagatgct atgctgatgg tggcagagag 1400  
gctagagggt ctttcaaca ttgaatcggg catggatccc atcgatgtga 1450  
agatttctga tgctattatg aacatgcagg ataatagtgt tcaagtgtct 1500  
cagaagggtt tccagggatg tggaccccc aagccccctc cagctggacg 1550  
aatttctcgt tccatctctg aaagtgcctt cagtgtcgc ttcagaccac 1600  
atcaccccg ggaacgcca accacagcag ctggcactag ttggaccga 1650  
ctggttactg atgtcaagga gaaactgaaa caggccaaga aattctggtc 1700  
ctcccttcg agcaacgttt gcaacgatga gaggatggct gcaggaaacg 1750  
gcaatgagga tgactgttgg aatgggaaag gcaaaagcag gtacctgttt 1800  
gcagtgacag gaaatggatt agccaaccag ggcaacaacc cagaggtcca 1850  
ggttgacacc agcaaccag acatactgat ccttcgtcaa atcatggctc 1900

Sequence Listing - P3230R1C1.txt

ttcagtgat gaccagcaag atgaagaatg catacaatgg gaacgacgtg 1950  
gacttctttg atatcagtga tgaaagtagt ggagaaggaa gtggaagtgg 2000  
ctgtgagtat cagcagtgcc cttcagagtt tgactacaat gccactgacc 2050  
atgctgggaa gagtgccaat gagaaagccg acagtgtctgg tgtccgtcct 2100  
ggggcacagg cctacctcct cactgtcttc tgcattctgt tcctgggtat 2150  
gcagagagag tggagataat tctcaaatc tgagaaaaag tgttcatcaa 2200  
aaagttaaaa ggcaccagtt atcacttttc taccatccta gtgactttgc 2250  
tttttaaatg aatggacaac aatgtacagt ttttactatg tggccactgg 2300  
tttaagaagt gctgactttg ttttctcatt cagttttggg aggaaaaggg 2350  
actgtgcatt gagttggttc ctgctcccc aaaccatgtt aaacgtggct 2400  
aacagtgtag gtacagaact atagttagtt gtgcatttgt gattttatca 2450  
ctctattatt tgtttgatg ttttttctc atttcgtttg tgggtttttt 2500  
tttccaactg tgatctcgcc ttgtttctta caagcaaacc agggtcctt 2550  
cttggcacgt aacatgtacg tatttctgaa atattaaata gctgtacaga 2600  
agcaggtttt atttatcatg ttatcttatt aaaagaaaaa gcccaaaaag 2650  
c 2651

<210> 24

<211> 556

<212> PRT

<213> Homo Sapien

<400> 24

Met Ala Arg Phe Gly Leu Pro Ala Leu Leu Cys Thr Leu Ala Val  
1 5 10 15

Leu Ser Ala Ala Leu Leu Ala Ala Glu Leu Lys Ser Lys Ser Cys  
20 25 30

Ser Glu Val Arg Arg Leu Tyr Val Ser Lys Gly Phe Asn Lys Asn  
35 40 45

Asp Ala Pro Leu His Glu Ile Asn Gly Asp His Leu Lys Ile Cys  
50 55 60

Pro Gln Gly Ser Thr Cys Cys Ser Gln Glu Met Glu Glu Lys Tyr  
65 70 75

Ser Leu Gln Ser Lys Asp Asp Phe Lys Ser Val Val Ser Glu Gln  
80 85 90

Sequence Listing - P3230R1C1.txt

Cys Asn His Leu Gln Ala Val Phe Ala Ser Arg Tyr Lys Lys Phe  
95 100 105

Asp Glu Phe Phe Lys Glu Leu Leu Glu Asn Ala Glu Lys Ser Leu  
110 115 120

Asn Asp Met Phe Val Lys Thr Tyr Gly His Leu Tyr Met Gln Asn  
125 130 135

Ser Glu Leu Phe Lys Asp Leu Phe Val Glu Leu Lys Arg Tyr Tyr  
140 145 150

Val Val Gly Asn Val Asn Leu Glu Glu Met Leu Asn Asp Phe Trp  
155 160 165

Ala Arg Leu Leu Glu Arg Met Phe Arg Leu Val Asn Ser Gln Tyr  
170 175 180

His Phe Thr Asp Glu Tyr Leu Glu Cys Val Ser Lys Tyr Thr Glu  
185 190 195

Gln Leu Lys Pro Phe Gly Asp Val Pro Arg Lys Leu Lys Leu Gln  
200 205 210

Val Thr Arg Ala Phe Val Ala Ala Arg Thr Phe Ala Gln Gly Leu  
215 220 225

Ala Val Ala Gly Asp Val Val Ser Lys Val Ser Val Val Asn Pro  
230 235 240

Thr Ala Gln Cys Thr His Ala Leu Leu Lys Met Ile Tyr Cys Ser  
245 250 255

His Cys Arg Gly Leu Val Thr Val Lys Pro Cys Tyr Asn Tyr Cys  
260 265 270

Ser Asn Ile Met Arg Gly Cys Leu Ala Asn Gln Gly Asp Leu Asp  
275 280 285

Phe Glu Trp Asn Asn Phe Ile Asp Ala Met Leu Met Val Ala Glu  
290 295 300

Arg Leu Glu Gly Pro Phe Asn Ile Glu Ser Val Met Asp Pro Ile  
305 310 315

Asp Val Lys Ile Ser Asp Ala Ile Met Asn Met Gln Asp Asn Ser  
320 325 330

Val Gln Val Ser Gln Lys Val Phe Gln Gly Cys Gly Pro Pro Lys  
335 340 345

Pro Leu Pro Ala Gly Arg Ile Ser Arg Ser Ile Ser Glu Ser Ala  
350 355 360

Sequence Listing - P3230R1C1.txt

Phe Ser Ala Arg Phe Arg Pro His His Pro Glu Glu Arg Pro Thr  
365 370 375

Thr Ala Ala Gly Thr Ser Leu Asp Arg Leu Val Thr Asp Val Lys  
380 385 390

Glu Lys Leu Lys Gln Ala Lys Lys Phe Trp Ser Ser Leu Pro Ser  
395 400 405

Asn Val Cys Asn Asp Glu Arg Met Ala Ala Gly Asn Gly Asn Glu  
410 415 420

Asp Asp Cys Trp Asn Gly Lys Gly Lys Ser Arg Tyr Leu Phe Ala  
425 430 435

Val Thr Gly Asn Gly Leu Ala Asn Gln Gly Asn Asn Pro Glu Val  
440 445 450

Gln Val Asp Thr Ser Lys Pro Asp Ile Leu Ile Leu Arg Gln Ile  
455 460 465

Met Ala Leu Arg Val Met Thr Ser Lys Met Lys Asn Ala Tyr Asn  
470 475 480

Gly Asn Asp Val Asp Phe Phe Asp Ile Ser Asp Glu Ser Ser Gly  
485 490 495

Glu Gly Ser Gly Ser Gly Cys Glu Tyr Gln Gln Cys Pro Ser Glu  
500 505 510

Phe Asp Tyr Asn Ala Thr Asp His Ala Gly Lys Ser Ala Asn Glu  
515 520 525

Lys Ala Asp Ser Ala Gly Val Arg Pro Gly Ala Gln Ala Tyr Leu  
530 535 540

Leu Thr Val Phe Cys Ile Leu Phe Leu Val Met Gln Arg Glu Trp  
545 550 555

Arg

<210> 25

<211> 870

<212> DNA

<213> Homo Sapien

<400> 25

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gctgagtatc ctgacctgag tcatccccag ggatcaggag cctccagcag 100

ggaaccttcc attatattct tcaagcaact tacagctgca cgcacagttg 150

cgatgaaagt tctaattctt tcctctctcc tgttgctgcc actaatgctg 200

Sequence Listing - P3230R1C1.txt

atgtccatgg tctctagcag cctgaatcca ggggtcgcca gaggccacag 250  
 ggaccgagggc caggcttcta ggagatggct ccaggaaggc ggccaagaat 300  
 gtgagtgcaa agattggttc ctgagagccc cgagaagaaa attcatgaca 350  
 gtgtctggggc tgccaaagaa gcagtgcccc tgtgatcatt tcaagggcaa 400  
 tgtgaagaaa acaagacacc aaaggcacca cagaaagcca aacaagcatt 450  
 ccagagcctg ccagcaatth ctcaacaat gtcagctaag aagctttgct 500  
 ctgcctttgt aggagctctg agcgcccact cttccaatta aacatttca 550  
 gccaaagaaga cagtgcacac acctaccaga cactcttctt ctcccacctc 600  
 actctccac tgtaccacc cctaaatcat tccagtgtc tcaaaaagca 650  
 tgttttcaa gatcatttg ttgttgctc tcttagtgt cttcttctt 700  
 cgtcagtctt agcctgtgcc ctccccttac ccaggcttag gcttaattac 750  
 ctgaaagatt ccaggaaact gtagcttct agctagtgtc atttaacct 800  
 aaatgcaatc aggaaagtag caaacagaag tcaataaata tttttaaag 850  
 tcaaaaaaaaa aaaaaaaaaa 870

<210> 26

<211> 119

<212> PRT

<213> Homo Sapien

<400> 26

Met Lys Val Leu Ile Ser Ser Leu Leu Leu Leu Pro Leu Met  
 1 5 10 15

Leu Met Ser Met Val Ser Ser Ser Leu Asn Pro Gly Val Ala Arg  
 20 25 30

Gly His Arg Asp Arg Gly Gln Ala Ser Arg Arg Trp Leu Gln Glu  
 35 40 45

Gly Gly Gln Glu Cys Glu Cys Lys Asp Trp Phe Leu Arg Ala Pro  
 50 55 60

Arg Arg Lys Phe Met Thr Val Ser Gly Leu Pro Lys Lys Gln Cys  
 65 70 75

Pro Cys Asp His Phe Lys Gly Asn Val Lys Lys Thr Arg His Gln  
 80 85 90

Arg His His Arg Lys Pro Asn Lys His Ser Arg Ala Cys Gln Gln  
 95 100 105

Phe Leu Lys Gln Cys Gln Leu Arg Ser Phe Ala Leu Pro Leu

Sequence Listing - P3230R1C1.txt

110

115

<210> 27

<211> 1371

<212> DNA

<213> Homo Sapien

<400> 27

ggacgccagc gcctgcagag gctgagcagg gaaaaagcca gtgccccagc 50  
ggaagcacag ctgagagctg gtctgccatg gacatcctgg tcccactcct 100  
gcagctgctg gtgctgcttc ttaccctgcc cctgcacctc atggctctgc 150  
tgggctgctg gcagcccctg tgcaaaagct acttccccta cctgatggcc 200  
gtgctgactc ccaagagcaa ccgcaagatg gagagcaaga aacgggagct 250  
cttcagccag ataaaggggc ttacaggagc ctccgggaaa gtggccctac 300  
tggagctggg ctgcggaacc ggagccaact ttcagttcta cccaccgggc 350  
tgcaggggtca cctgcctaga cccaaatccc cactttgaga agttcctgac 400  
aaagagcatg gctgagaaca ggcacctcca atatgagcgg tttgtggtgg 450  
ctcttgagga ggacatgaga cagctggctg atggctccat ggatgtggtg 500  
gtctgcactc tgggtgctg ctctgtgcag agcccaagga aggtcctgca 550  
ggaggtccgg agagtactga gaccgggagg tgtgctcttt ttctgggagc 600  
atgtggcaga accatatgga agctgggcct tcatgtggca gcaagtttcc 650  
gagcccacct ggaacacat tggggatggc tgctgcctca ccagagagac 700  
ctggaaggat cttgagaacg ccagttctc cgaaatcaa atggaacgac 750  
agccccctcc cttgaagtgg ctacctgtg ggccccacat catgggaaag 800  
gctgtcaaac aatcttccc aagctccaag gcactcattt gctccttccc 850  
cagcctcaa ttagaacaag ccaccacca gcctatctat cttccactga 900  
gagggaccta gcagaatgag agaagacatt catgtaccac ctactagtcc 950  
ctctctccc aacctctgcc agggcaatct ctaactcaa tccgccttc 1000  
gacagtga aaagctctact tctacgctga ccaggggagg aaacactagg 1050  
acctgttgt atcctcaact gcaagtttct ggactagtct cccaacgttt 1100  
gcctcccaat gttgtccctt tccttcgttc ccatggtaaa gctcctctcg 1150  
ctttcctcct gaggctacac ccatgcgtct ctaggaactg gtcacaaaag 1200

Sequence Listing - P3230R1C1.txt

tcatggtgcc tgcattcctg ccaagccccc ctgacctct ctccccacta 1250

ccaccttctt cctgagctgg gggcaccagg gagaatcaga gatgctgggg 1300

atgccagagc aagactcaaa gaggcagagg tttgttctc aaatattttt 1350

taataaatag acgaaaccac g 1371

<210> 28

<211> 277

<212> PRT

<213> Homo Sapien

<400> 28

Met Asp Ile Leu Val Pro Leu Leu Gln Leu Leu Val Leu Leu Leu  
1 5 10 15

Thr Leu Pro Leu His Leu Met Ala Leu Leu Gly Cys Trp Gln Pro  
20 25 30

Leu Cys Lys Ser Tyr Phe Pro Tyr Leu Met Ala Val Leu Thr Pro  
35 40 45

Lys Ser Asn Arg Lys Met Glu Ser Lys Lys Arg Glu Leu Phe Ser  
50 55 60

Gln Ile Lys Gly Leu Thr Gly Ala Ser Gly Lys Val Ala Leu Leu  
65 70 75

Glu Leu Gly Cys Gly Thr Gly Ala Asn Phe Gln Phe Tyr Pro Pro  
80 85 90

Gly Cys Arg Val Thr Cys Leu Asp Pro Asn Pro His Phe Glu Lys  
95 100 105

Phe Leu Thr Lys Ser Met Ala Glu Asn Arg His Leu Gln Tyr Glu  
110 115 120

Arg Phe Val Val Ala Pro Gly Glu Asp Met Arg Gln Leu Ala Asp  
125 130 135

Gly Ser Met Asp Val Val Val Cys Thr Leu Val Leu Cys Ser Val  
140 145 150

Gln Ser Pro Arg Lys Val Leu Gln Glu Val Arg Arg Val Leu Arg  
155 160 165

Pro Gly Gly Val Leu Phe Phe Trp Glu His Val Ala Glu Pro Tyr  
170 175 180

Gly Ser Trp Ala Phe Met Trp Gln Gln Val Phe Glu Pro Thr Trp  
185 190 195

Lys His Ile Gly Asp Gly Cys Cys Leu Thr Arg Glu Thr Trp Lys



Sequence Listing - P3230R1C1.txt

200	205	210
Asp Leu Glu Asn Ala Gln Phe Ser Glu Ile Gln Met Glu Arg Gln		
215	220	225
Pro Pro Pro Leu Lys Trp Leu Pro Val Gly Pro His Ile Met Gly		
230	235	240
Lys Ala Val Lys Gln Ser Phe Pro Ser Ser Lys Ala Leu Ile Cys		
245	250	255
Ser Phe Pro Ser Leu Gln Leu Glu Gln Ala Thr His Gln Pro Ile		
260	265	270
Tyr Leu Pro Leu Arg Gly Thr		
275		

<210> 29  
 <211> 494  
 <212> DNA  
 <213> Homo Sapien

<400> 29  
 caatgtttgc ctatccacct cccccaagcc cctttaccta tgctgctgct 50  
 aacgctgctg ctgctgctgc tgctgcttaa aggctcatgc ttggagtggg 100  
 gactggtcgg tgcccagaaa gtctcttctg ccactgacgc ccccatcagg 150  
 gattgggcct tctttcccc ttcctttctg tgtctctctgc ctcatcgcc 200  
 tgccatgacc tgcagccaag ccagcccccg tggggaaggg gagaaagtgg 250  
 gggatgggcta agaaagctgg gagataggga acagaagagg gtagtgggtg 300  
 ggctaggggg gctgccttat ttaaagtggg tgtttatgat tcttatacta 350  
 atttatacaa agatattaag gccctgttca ttaagaaatt gttcccttcc 400  
 cctgtgttca atgtttgtaa agattgttct gtgtaaatat gtctttataa 450  
 taaacagtta aaagctgaaa aaaaaaaaaa aaaaaaaaaa aaaa 494

<210> 30  
 <211> 73  
 <212> PRT  
 <213> Homo Sapien

<400> 30  
 Met Leu Leu Leu Thr Leu Leu Leu Leu Leu Leu Leu Lys Gly  
 1 5 10 15  
 Ser Cys Leu Glu Trp Gly Leu Val Gly Ala Gln Lys Val Ser Ser  
 20 25 30

Sequence Listing - P3230R1C1.txt

Ala Thr Asp Ala Pro Ile Arg Asp Trp Ala Phe Phe Pro Pro Ser  
35 40 45

Phe Leu Cys Leu Leu Pro His Arg Pro Ala Met Thr Cys Ser Gln  
50 55 60  
Ala Gln Pro Arg Gly Glu Gly Glu Lys Val Gly Asp Gly  
65 70

<210> 31

<211> 1660

<212> DNA

<213> Homo Sapien

<400> 31

gtttgaattc cttaactat acccacagtc caaaagcaga ctactgtgt 50  
cccaggctac cagttctccc aagcaagtca tttcccttat ttaaccgatg 100  
tgtccctcaa acacctgagt gctactccct attgcatct gttttgataa 150  
atgatgttga caccctccac cgaattctaa gtggaatcat gtcgggaaga 200  
gatacaatcc ttggcctgtg tatcctcgca ttagccttgt ctttgccat 250  
gatgtttacc ttcagattca tcaccacct tctggttcac attttcattt 300  
cattgggtat ttggggattg ttgtttgtct gcggtgtttt atggtggctg 350  
tattatgact ataccaacga cctcagcata gaattggaca cagaaaggga 400  
aaatatgaag tgcgtgctgg ggtttgctat cgtatccaca ggcacacgg 450  
cagtgtgct cgtcttgatt ttgtttctca gaaagagaat aaaattgaca 500  
gttgagcttt tccaaatcac aaataaagcc atcagcagtg ctcccttct 550  
gctgttccag cactgtgga catttgccat ctcattttc ttctgggtcc 600  
tctgggtggc tgtgtgctg agcctgggaa ctgcaggagc tgcccagggt 650  
atggaaggcg gccaagtga atataagccc ctttcgggca ttcggtacat 700  
gtggtcgtac catttaattg gcctcatctg gactagtga ttcaccttg 750  
cgtgccagca aatgactata gctggggcag tggttacttg ttattcaac 800  
agaagtaaaa atgatcctc tgatcatccc atccttcgt ctctctcat 850  
tctcttctc taccatcaag gaaccgtgt gaaaggtca ttttaactc 900  
ctgtggtgag gattccgaga atcattgtca tgtacatga aaacgcactg 950  
aaagaacagc agcatggtgc attgtccagg tacctgttc gatgtgcta 1000  
ctgctgtttc tgggtgtctg acaataacct gctcatctc aaccagaatg 1050

Sequence Listing - P3230R1C1.txt

catatactac aactgctatt aatgggacag atttctgtac atcagcaaaa 1100  
gatgcattca aaatcttgtc caagaactca agtcacttta catctattaa 1150  
ctgctttgga gacttcataa ttttctagg aaaggtgta gtggtgtgtt 1200  
tcactgtttt tggaggactc atggctttta actacaatcg ggcattccag 1250  
gtgtgggcag tccctctgtt attggtagct tttttgcct acttagtagc 1300  
ccatagtttt ttatctgtgt ttgaaactgt gctggatgca ctttctctgt 1350  
gttttctgt tgatctggaa acaaatgatg gatcgtcaga aaagccctac 1400  
tttatggatc aagaatttct gagtttcgta aaaaggagca acaaattaa 1450  
caatgcaagg gcacagcagg acaagcactc attaaggaat gaggagggaa 1500  
cagaactcca ggccattgtg agatagatac ccatttaggt atctgtacct 1550  
ggaaaacatt tccttctaag agccatttac agaatagaag atgagaccac 1600  
tagagaaaag ttagtgaatt ttttttaaa agacctaata aaccctattc 1650  
ttctcaaaa 1660

<210> 32

<211> 445

<212> PRT

<213> Homo Sapien

<400> 32

Met	Ser	Gly	Arg	Asp	Thr	Ile	Leu	Gly	Leu	Cys	Ile	Leu	Ala	Leu
1							5						10	15
Ala	Leu	Ser	Leu	Ala	Met	Met	Phe	Thr	Phe	Arg	Phe	Ile	Thr	Thr
							20						25	30
Leu	Leu	Val	His	Ile	Phe	Ile	Ser	Leu	Val	Ile	Leu	Gly	Leu	Leu
							35						40	45
Phe	Val	Cys	Gly	Val	Leu	Trp	Trp	Leu	Tyr	Tyr	Asp	Tyr	Thr	Asn
							50						55	60
Asp	Leu	Ser	Ile	Glu	Leu	Asp	Thr	Glu	Arg	Glu	Asn	Met	Lys	Cys
							65						70	75
Val	Leu	Gly	Phe	Ala	Ile	Val	Ser	Thr	Gly	Ile	Thr	Ala	Val	Leu
							80						85	90
Leu	Val	Leu	Ile	Phe	Val	Leu	Arg	Lys	Arg	Ile	Lys	Leu	Thr	Val
							95						100	105
Glu	Leu	Phe	Gln	Ile	Thr	Asn	Lys	Ala	Ile	Ser	Ser	Ala	Pro	Phe
							110						115	120

Sequence Listing - P3230R1C1.txt

Leu Leu Phe Gln Pro Leu Trp Thr Phe Ala Ile Leu Ile Phe Phe  
 125 130 135  
 Trp Val Leu Trp Val Ala Val Leu Leu Ser Leu Gly Thr Ala Gly  
 140 145 150  
 Ala Ala Gln Val Met Glu Gly Gly Gln Val Glu Tyr Lys Pro Leu  
 155 160 165  
 Ser Gly Ile Arg Tyr Met Trp Ser Tyr His Leu Ile Gly Leu Ile  
 170 175 180  
 Trp Thr Ser Glu Phe Ile Leu Ala Cys Gln Gln Met Thr Ile Ala  
 185 190 195  
 Gly Ala Val Val Thr Cys Tyr Phe Asn Arg Ser Lys Asn Asp Pro  
 200 205 210  
 Pro Asp His Pro Ile Leu Ser Ser Leu Ser Ile Leu Phe Phe Tyr  
 215 220 225  
 His Gln Gly Thr Val Val Lys Gly Ser Phe Leu Ile Ser Val Val  
 230 235 240  
 Arg Ile Pro Arg Ile Ile Val Met Tyr Met Gln Asn Ala Leu Lys  
 245 250 255  
 Glu Gln Gln His Gly Ala Leu Ser Arg Tyr Leu Phe Arg Cys Cys  
 260 265 270  
 Tyr Cys Cys Phe Trp Cys Leu Asp Lys Tyr Leu Leu His Leu Asn  
 275 280 285  
 Gln Asn Ala Tyr Thr Thr Thr Ala Ile Asn Gly Thr Asp Phe Cys  
 290 295 300  
 Thr Ser Ala Lys Asp Ala Phe Lys Ile Leu Ser Lys Asn Ser Ser  
 305 310 315  
 His Phe Thr Ser Ile Asn Cys Phe Gly Asp Phe Ile Ile Phe Leu  
 320 325 330  
 Gly Lys Val Leu Val Val Cys Phe Thr Val Phe Gly Gly Leu Met  
 335 340 345  
 Ala Phe Asn Tyr Asn Arg Ala Phe Gln Val Trp Ala Val Pro Leu  
 350 355 360  
 Leu Leu Val Ala Phe Phe Ala Tyr Leu Val Ala His Ser Phe Leu  
 365 370 375  
 Ser Val Phe Glu Thr Val Leu Asp Ala Leu Phe Leu Cys Phe Ala  
 380 385 390  
 Val Asp Leu Glu Thr Asn Asp Gly Ser Ser Glu Lys Pro Tyr Phe

Sequence Listing - P3230R1C1.txt

395 400 405

Met Asp Gln Glu Phe Leu Ser Phe Val Lys Arg Ser Asn Lys Leu  
410 415 420

Asn Asn Ala Arg Ala Gln Gln Asp Lys His Ser Leu Arg Asn Glu  
425 430 435

Glu Gly Thr Glu Leu Gln Ala Ile Val Arg  
440 445

<210> 33

<211> 2773

<212> DNA

<213> Homo Sapien

<400> 33

gttcgattag ctctctgag aagaagagaa aaggttcttg gacctctccc 50

tgtttcttcc ttagaataat ttgtatggga tttgtgatgc aggaaagcct 100  
aagggaataa gaattattcat tctgtgtggt gaaaattttt tgaaaaaaaa 150

attgccttct tcaaacaagg gtgtcattct gatatttatg aggactgttg 200

ttctcactat gaaggcatct gttattgaaa tggtccttgt tttgctggtg 250

actggagtac attcaacaa agaaacggca aagaagatta aaaggcccaa 300

gttcactgtg cctcagatca actgcgatgt caaagccgga aagatcatcg 350

atcctgagtt cattgtgaaa tgtccagcag gatgccaaga ccccaaatac 400

catgtttatg gcactgacgt gtatgcatcc tactccagtg tgtgtggcgc 450

tgccgtacac agtgggtgtgc ttgataattc aggagggaaa atactgttc 500

ggaagggtgc tggacagtct ggttacaag ggagttattc caacggtgtc 550

caatcgttat ccctaccacg atggagagaa tcctttatcg tcttagaaag 600

taaacccaaa aagggtgtaa cctacccatc agctcttaca tactcatcat 650

cgaaaagtcc agctgcccaa gcagggtgaga ccacaaaagc ctatcagagg 700

ccacctattc cagggaacac tgcacagccg gtcactctga tgcagcttct 750

ggctgtcact gtagctgtgg ccacccccac caccttgcca aggccatccc 800

cttctgtgc ttctaccacc agcatcccca gaccacaatc agtggggccac 850

aggagccagg agatggatct ctggtccact gccacctaca caagcagcca 900

aaacaggccc agagctgatc caggtatcca aaggcaagat ccttcaggag 950

ctgccttcca gaaacctgtt ggagcggatg tcagcctggg acttggtcca 1000

Sequence Listing - P3230R1C1.txt

aaagaagaat tgagcacaca gtctttggag ccagtatccc tgggagatcc 1050  
aaactgcaaa attgacttgt cgtttttaat tgatgggagc accagcattg 1100  
gcaaacggcg attccgaatc cagaagcagc tcctggctga tgttgcccaa 1150  
gctcttgaca ttggccctgc cgggtccactg atgggtgttg tccagtatgg 1200  
agacaaccct gctactcact ttaacctcaa gacacacacg aattctcgag 1250  
atctgaagac agccatagag aaaattactc agagaggagg actttctaata 1300  
gtaggtcggg ccatctcctt tgtgaccaag aacttctttt ccaaagccaa 1350  
tggaacaga agcggggctc ccaatgtggt ggtggtgatg gtggatggct 1400  
ggccacgga caaagtggag gaggcttcaa gacttgcgag agagtcagga 1450  
atcaacattt tcttcacac cattgaaggt gctgctgaaa atgagaagca 1500  
gtatgtggtg gagcccaact ttgcaacaa ggccgtgtgc agaacaacg 1550  
gcttctactc gctccacgtg cagagctggt ttggcctcca caagaccctg 1600  
cagcctctgg tgaagcgggt ctgcgacact gaccgcctgg cctgcagcaa 1650  
gacctgctg aactcggctg acattggctt cgtcatcgac ggctccagca 1700  
gtgtggggac gggcaactc cgcaccgtcc tccagtttgt gaccaacctc 1750  
accaagagt ttgagatttc cgacacggac acgcgcatcg gggccgtgca 1800  
gtacacctac gaacagcggc tggagtttgg gttcgacaag tacagcagca 1850  
agcctgacat cctcaacgcc atcaagaggg tgggctactg gagtgggtggc 1900  
accagcacgg gggctgcat caacttcgcc ctggagcagc tcttaagaa 1950  
gtccaagccc acaagagga agttaatgat cctcatcacc gacgggaggt 2000  
cctacgacga cgtccggatc ccagccatgg ctgcccattt gaagggagtg 2050  
atcacctatg cgataggcgt tgcctgggct gcccaagagg agctagaagt 2100  
cattgccact caccgcgcca gagaccactc cttctttgtg gacgagtttg 2150  
acaacctcca tcagtatgtc cccaggatca tccagaacat ttgtacagag 2200  
ttcaactcac agcctcggaa ctgaattcag agcaggcaga gcaccagcaa 2250  
gtgctgcttt actaactgac gtgttgacc accccaccgc ttaatggggc 2300  
acgcacggtg catcaagtct tgggcagggc atggagaaac aaatgtcttg 2350

Sequence Listing - P3230R1C1.txt

ttattattct ttgccatcat gctttttcat attccaaaac ttggagttac 2400  
 aaagatgatc acaaacgtat agaatgagcc aaaaggctac atcatgttga 2450  
 ggggtgctgga gattttacat tttgacaatt gttttcaaaa taaatgttcg 2500  
 gaatacagtg cagcccttac gacaggctta cgtagagctt ttgtgagatt 2550  
 ttttaagttgt tattttctgat ttgaactctg taaccctcag caagtttcat 2600  
 tttgtcatg acaatgtagg aattgctgaa ttaaatgttt agaaggatga 2650  
 aaaataaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 2700  
 aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 2750  
 aaaaaaaaaa aaaaaaaaaa aag 2773

<210> 34  
 <211> 678  
 <212> PRT  
 <213> Homo Sapien

<400> 34  
 Met Arg Thr Val Val Leu Thr Met Lys Ala Ser Val Ile Glu Met  
 1 5 10 15  
 Phe Leu Val Leu Leu Val Thr Gly Val His Ser Asn Lys Glu Thr  
 20 25 30  
 Ala Lys Lys Ile Lys Arg Pro Lys Phe Thr Val Pro Gln Ile Asn  
 35 40 45  
 Cys Asp Val Lys Ala Gly Lys Ile Ile Asp Pro Glu Phe Ile Val  
 50 55 60  
 Lys Cys Pro Ala Gly Cys Gln Asp Pro Lys Tyr His Val Tyr Gly  
 65 70 75  
 Thr Asp Val Tyr Ala Ser Tyr Ser Ser Val Cys Gly Ala Ala Val  
 80 85 90  
 His Ser Gly Val Leu Asp Asn Ser Gly Gly Lys Ile Leu Val Arg  
 95 100 105  
 Lys Val Ala Gly Gln Ser Gly Tyr Lys Gly Ser Tyr Ser Asn Gly  
 110 115 120  
 Val Gln Ser Leu Ser Leu Pro Arg Trp Arg Glu Ser Phe Ile Val  
 125 130 135  
 Leu Glu Ser Lys Pro Lys Lys Gly Val Thr Tyr Pro Ser Ala Leu  
 140 145 150  
 Thr Tyr Ser Ser Ser Lys Ser Pro Ala Ala Gln Ala Gly Glu Thr

Sequence Listing - P3230R1C1.txt

155	160	165
Thr Lys Ala Tyr Gln Arg	Pro Pro Ile Pro Gly Thr Thr Ala Gln	
170	175	180
Pro Val Thr Leu Met Gln	Leu Leu Ala Val Thr Val Ala Val Ala	
185	190	195
Thr Pro Thr Thr Leu Pro	Arg Pro Ser Pro Ser Ala Ala Ser Thr	
200	205	210
Thr Ser Ile Pro Arg Pro	Gln Ser Val Gly His Arg Ser Gln Glu	
215	220	225
Met Asp Leu Trp Ser Thr	Ala Thr Tyr Thr Ser Ser Gln Asn Arg	
230	235	240
Pro Arg Ala Asp Pro Gly	Ile Gln Arg Gln Asp Pro Ser Gly Ala	
245	250	255
Ala Phe Gln Lys Pro Val	Gly Ala Asp Val Ser Leu Gly Leu Val	
260	265	270
Pro Lys Glu Glu Leu Ser	Thr Gln Ser Leu Glu Pro Val Ser Leu	
275	280	285
Gly Asp Pro Asn Cys Lys	Ile Asp Leu Ser Phe Leu Ile Asp Gly	
290	295	300
Ser Thr Ser Ile Gly Lys	Arg Arg Phe Arg Ile Gln Lys Gln Leu	
305	310	315
Leu Ala Asp Val Ala Gln	Ala Leu Asp Ile Gly Pro Ala Gly Pro	
320	325	330
Leu Met Gly Val Val Gln	Tyr Gly Asp Asn Pro Ala Thr His Phe	
335	340	345
Asn Leu Lys Thr His Thr	Asn Ser Arg Asp Leu Lys Thr Ala Ile	
350	355	360
Glu Lys Ile Thr Gln Arg	Gly Gly Leu Ser Asn Val Gly Arg Ala	
365	370	375
Ile Ser Phe Val Thr Lys	Asn Phe Phe Ser Lys Ala Asn Gly Asn	
380	385	390
Arg Ser Gly Ala Pro Asn	Val Val Val Val Met Val Asp Gly Trp	
395	400	405
Pro Thr Asp Lys Val Glu	Glu Ala Ser Arg Leu Ala Arg Glu Ser	
410	415	420
Gly Ile Asn Ile Phe Phe	Ile Thr Ile Glu Gly Ala Ala Glu Asn	
425	430	435



Sequence Listing - P3230R1C1.txt

Glu Lys Gln Tyr Val Val Glu Pro Asn Phe Ala Asn Lys Ala Val  
440 445 450

Cys Arg Thr Asn Gly Phe Tyr Ser Leu His Val Gln Ser Trp Phe  
455 460 465

Gly Leu His Lys Thr Leu Gln Pro Leu Val Lys Arg Val Cys Asp  
470 475 480

Thr Asp Arg Leu Ala Cys Ser Lys Thr Cys Leu Asn Ser Ala Asp  
485 490 495

Ile Gly Phe Val Ile Asp Gly Ser Ser Ser Val Gly Thr Gly Asn  
500 505 510

Phe Arg Thr Val Leu Gln Phe Val Thr Asn Leu Thr Lys Glu Phe  
515 520 525

Glu Ile Ser Asp Thr Asp Thr Arg Ile Gly Ala Val Gln Tyr Thr  
530 535 540

Tyr Glu Gln Arg Leu Glu Phe Gly Phe Asp Lys Tyr Ser Ser Lys  
545 550 555

Pro Asp Ile Leu Asn Ala Ile Lys Arg Val Gly Tyr Trp Ser Gly  
560 565 570

Gly Thr Ser Thr Gly Ala Ala Ile Asn Phe Ala Leu Glu Gln Leu  
575 580 585

Phe Lys Lys Ser Lys Pro Asn Lys Arg Lys Leu Met Ile Leu Ile  
590 595 600

Thr Asp Gly Arg Ser Tyr Asp Asp Val Arg Ile Pro Ala Met Ala  
605 610 615

Ala His Leu Lys Gly Val Ile Thr Tyr Ala Ile Gly Val Ala Trp  
620 625 630

Ala Ala Gln Glu Glu Leu Glu Val Ile Ala Thr His Pro Ala Arg  
635 640 645

Asp His Ser Phe Phe Val Asp Glu Phe Asp Asn Leu His Gln Tyr  
650 655 660

Val Pro Arg Ile Ile Gln Asn Ile Cys Thr Glu Phe Asn Ser Gln  
665 670 675

Pro Arg Asn

<210> 35

<211> 2095

<212> DNA

Sequence Listing - P3230R1C1.txt

<213> Homo Sapien

<400> 35

ccgagcacag gagattgcct gcgttagga ggtggctgcg ttgtgggaaa 50  
agctatcaag gaagaaattg ccaaaccatg tcttttttc tgttttcaga 100  
gtagttcaca acagatctga gtgttttaat taagcatgga atacagaaaa 150  
caacaaaaaa cttaagcttt aatttcatct ggaattccac agttttctta 200  
gctcctgga cccggttgac ctgttggtc tcccgtgg ctgctctatc 250  
acgtggtgct ctccgactac tcaccccgag tgtaaagaac ctgcggctcg 300  
cgtgcttctg agctgctgtg gatggcctcg gctctctgga ctgtccttcc 350  
gagtaggatg tactgagat cctcaaatg gagcctctg ctgctgtcac 400  
tcctgagttt cttgtgatg tggtaacctca gccttccca ctacaatgtg 450  
atagaacgcg tgaactggat gtacttctat gagtatgagc cgatttacag 500  
acaagacttt cacttcacac ttcgagagca ttcaaactgc tctcatcaa 550  
atccatttct ggtcattctg gtgacctcc acccttcaga tgtgaaagcc 600  
aggcaggcca ttagagttac ttggggtgaa aaaaagtctt ggtggggata 650  
tgaggttctt acatttttct tattaggcca agaggctgaa aaggaagaca 700  
aatgttggc attgtcctta gaggatgaac accttctta tggtgacata 750  
atccgacaag attttttaga cacatataat aactgacct tgaaaacat 800  
tatggcattc aggtgggtaa ctgagtttg cccaatgcc aagtacgtaa 850  
tgaagacaga cactgatgtt tcatcaata ctggcaattt agtgaagtat 900  
cttttaaacc taaaccactc agagaagttt tcacagggtt atcctcta 950  
tgataattat tcctatagag gattttacca aaaaacccat atttcttacc 1000  
aggagtatcc ttcaagggtg tccctccat actgcagtgg gttgggttat 1050  
ataatgtcca gagatttggg gcccaaggatc tatgaaatga tgggtcacgt 1100  
aaaaccatc aagtttgaag atgtttatgt cgggatctgt ttgaatttat 1150  
taaaagtga cttcatatt ccagaagaca caaatctttt ctttctatat 1200  
agaatccatt tggatgtctg tcaactgaga cgtgtgattg cagcccatgg 1250  
cttttctcc aaggagatca tcacttttg gcaggctatg ctaaggaaca 1300

Sequence Listing - P3230R1C1.txt

ccacatgccca ttattaactt cacattctac aaaaagccta gaaggacagg 1350  
 ataccttggtg gaaagtgtta aataaagtag gtactgtgga aaattcatgg 1400  
 ggaggtcagt gtgctggcctt acactgaact gaaactcatg aaaaaccag 1450  
 actggagact ggaggggttac acttgatgatt tattagtcag gcccttcaaa 1500  
 gatgatatgt ggaggaatta aatataaagg aattggaggt ttttgctaaa 1550  
 gaaattaata ggaccaaaaca atttggacat gtcattctgt agactagaat 1600  
 ttcttaaaag ggtgttactg agttataagc tcactaggct gtaaaaacaa 1650  
 aacaatgtag agttttatatt attgaacaat gtagtcactt gaagggtttg 1700  
 tgtatatctt atgtggatta ccaatttaaa aatatatgta gttctgtgtc 1750  
 aaaaaacttc ttactgaag ttatactgaa caaaatttta cctgttttg 1800  
 gtcatttata aagtacttca agatgttgca gtattcaca gttattatta 1850  
 tttaaaatta cttaacttt gtgtttttaa atgttttgac gatttcaata 1900  
 caagataaaa aggatagtga atcattcttt acatgcaaac atttccagt 1950  
 tacttaactg atcagtttat tattgatata tcactccatt aatgtaaagt 2000  
 cataggtcat tattgcatat cagtaatctc ttggactttg ttaaatattt 2050  
 tactgtggta atatagagaa gaattaaagc aagaaaatct gaaaa 2095

<210> 36

<211> 331

<212> PRT

<213> Homo Sapien

<400> 36

Met Ala Ser Ala Leu Trp Thr Val Leu Pro Ser Arg Met Ser Leu  
 1 5 10 15

Arg Ser Leu Lys Trp Ser Leu Leu Leu Ser Leu Leu Ser Phe  
 20 25 30

Phe Val Met Trp Tyr Leu Ser Leu Pro His Tyr Asn Val Ile Glu  
 35 40 45

Arg Val Asn Trp Met Tyr Phe Tyr Glu Tyr Glu Pro Ile Tyr Arg  
 50 55 60

Gln Asp Phe His Phe Thr Leu Arg Glu His Ser Asn Cys Ser His  
 65 70 75

Gln Asn Pro Phe Leu Val Ile Leu Val Thr Ser His Pro Ser Asp  
 80 85 90

Sequence Listing - P3230R1C1.txt

Val Lys Ala Arg Gln Ala Ile Arg Val Thr Trp Gly Glu Lys Lys  
95 100 105

Ser Trp Trp Gly Tyr Glu Val Leu Thr Phe Phe Leu Leu Gly Gln  
110 115 120

Glu Ala Glu Lys Glu Asp Lys Met Leu Ala Leu Ser Leu Glu Asp  
125 130 135

Glu His Leu Leu Tyr Gly Asp Ile Ile Arg Gln Asp Phe Leu Asp  
140 145 150

Thr Tyr Asn Asn Leu Thr Leu Lys Thr Ile Met Ala Phe Arg Trp  
155 160 165

Val Thr Glu Phe Cys Pro Asn Ala Lys Tyr Val Met Lys Thr Asp  
170 175 180

Thr Asp Val Phe Ile Asn Thr Gly Asn Leu Val Lys Tyr Leu Leu  
185 190 195

Asn Leu Asn His Ser Glu Lys Phe Phe Thr Gly Tyr Pro Leu Ile  
200 205 210

Asp Asn Tyr Ser Tyr Arg Gly Phe Tyr Gln Lys Thr His Ile Ser  
215 220 225

Tyr Gln Glu Tyr Pro Phe Lys Val Phe Pro Pro Tyr Cys Ser Gly  
230 235 240

Leu Gly Tyr Ile Met Ser Arg Asp Leu Val Pro Arg Ile Tyr Glu  
245 250 255

Met Met Gly His Val Lys Pro Ile Lys Phe Glu Asp Val Tyr Val  
260 265 270

Gly Ile Cys Leu Asn Leu Leu Lys Val Asn Ile His Ile Pro Glu  
275 280 285

Asp Thr Asn Leu Phe Phe Leu Tyr Arg Ile His Leu Asp Val Cys  
290 295 300

Gln Leu Arg Arg Val Ile Ala Ala His Gly Phe Ser Ser Lys Glu  
305 310 315

Ile Ile Thr Phe Trp Gln Val Met Leu Arg Asn Thr Thr Cys His  
320 325 330

Tyr

<210> 37  
<211> 2846  
<212> DNA

Sequence Listing - P3230R1C1.txt

<213> Homo Sapien

<400> 37

cgctcgggca ccagccgcgg caaggatgga gctgggttgc tggacgcagt 50  
 tggggctcac ttttctcag ctcttctca tctcgtcctt gccaagagag 100  
 tacacagtca ttaatgaagc ctgccctgga gcagagtgga atatcatgtg 150  
 tcgggagtgc tgtgaatatg atcagattga gtgcgtctgc cccggaaaga 200  
 ggggaagtcgt gggttatacc atcccttgct gcaggaatga ggagaatgag 250  
 tgtgactcct gcctgatcca cccaggttgt accatctttg aaaactgcaa 300  
 gagctgccga aatggctcat ggggggggtac ctggatgac ttctatgtga 350  
 aggggttcta ctgtgcagag tgccgagcag gctggtacgg aggagactgc 400  
 atgcgatgtg gccaggttct gcgagcccca aagggtcaga tttgtttgga 450  
 aagctatccc ctaaatgctc actgtgaatg gaccattcat gctaaacctg 500  
 ggtttgcct ccaactaaga tttgtcatgt tgagtctgga gtttgactac 550  
 atgtgccagt atgactatgt tgaggttcgt gatggagaca accgcgatgg 600  
 ccagatcatc aagcgtgtct gtggcaacga gcggccagct cctatccaga 650  
 gcataggatc ctactccac gtctcttcc actccgatgg ctccaagaat 700  
 tttgacgggt tccatgccat ttatgaggag atcacagcat gctcctcatc 750  
 ccctgtttc catgacggca cgtgcgtcct tgacaaggct ggatcttaca 800  
 agtgtgcctg ctggcaggc tatactgggc agcgtgtga aaatctcctt 850  
 gaagaaagaa actgctcaga ccctgggggc ccagtcaatg ggtaccagaa 900  
 aataacaggg ggccctgggc ttatcaacgg acgcatgct aaaattggca 950  
 ccgtggtgtc tttctttgt aacaactcct atgttcttag tggcaatgag 1000  
 aaaagaactt gccagcagaa tggagagtgg tcagggaac agcccatctg 1050  
 cataaaagcc tgccgagaac caaagatttc agacctggtg agaaggagag 1100  
 ttcttccgat gcaggttcag tcaagggaga caccattaca ccagctatac 1150  
 tcagcggcct tcagcaagca gaaactgcag agtgccccta ccaagaagcc 1200  
 agcccttccc tttggagatc tgcccatggg ataccaacat ctgcataccc 1250  
 agctccagta tgagtgcac tcaccttct accgccgcct gggcagcagc 1300

Sequence Listing - P3230R1C1.txt

aggaggacat gtctgaggac tgggaagtgg agtgggcggg caccatcctg 1350  
catccctatc tgcgggaaaa ttgagaacat cactgctcca aagaccaag 1400  
ggttgcgctg gccgtggcag gcagccatct acaggaggac cagcggggtg 1450  
catgacggca gcctacacaa gggagcgtgg ttcctagtct gcagcgggtc 1500  
cctggtgaat gagcgactg tgggtggtggc tgcccactgt gttactgacc 1550  
tggggaaggt caccatgac aagacagcag acctgaaagt tgttttggg 1600  
aaattctacc gggatgatga ccgggatgag aagaccatcc agagcctaca 1650  
gatttctgt atcattctgc atcccaacta tgaccccatc ctgcttgatg 1700  
ctgacatcgc catcctgaag ctctagaca aggcccgtat cagcacccga 1750  
gtccagccca tctgcctcgc tgccagtgg gatctcagca cttccttcca 1800  
ggagtccac atcactgtgg ctggctggaa tgtcctggca gacgtgagga 1850  
gccctggctt caagaacgac aactgcgct ctggggtggt cagtgtggtg 1900  
gactcgctgc tgtgtgagga gcagcatgag gaccatggca tcccagtgag 1950  
tgtcactgat aacatgttct gtgccagctg ggaaccact gcccttctg 2000  
atatctgcac tgcagagaca ggaggcatcg cggtgtgtc cttcccggga 2050  
cgagcatctc ctgagccacg ctggcatctg atgggactgg tcagctggag 2100  
ctatgataaa acatgcagcc acaggctctc cactgccttc accaaggtgc 2150  
tgccttttaa agactggatt gaaagaaata tgaaatgaac catgctcatg 2200  
cactcctga gaagtgttc tgtatatccg tctgtacgtg tgcattgcg 2250  
tgaagcagtg tgggcctgaa gtgtgattg gcctgtgaac ttggctgtgc 2300  
cagggttct gacttcaggg aaaaaactca gtgaaggggtg agtagacctc 2350  
cattgctggt aggctgatgc cgcgtccact actaggacag ccaattggaa 2400  
gatgccaggg cttgcaagaa gtaagtttct tcaaagaaga ccatatacaa 2450  
aaccttcca ctccactgac ctggtggtct tcccaactt tcagttatac 2500  
gaatgccatc agcttgacca ggaagatct gggcttcctg agggcccttt 2550  
tgaggctctc aagttctaga gagctgcctg tgggacagcc cagggcagca 2600  
gagctgggat gtggtgcatg cttttgtgta catggccaca gtacagtctg 2650  
gtccttttcc ttcccatct cttgtacaca ttttaataaa ataagggttg 2700

Sequence Listing - P3230R1C1.txt

gcttctgaac tacaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 2750

aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 2800

aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaa 2846

<210> 38

<211> 720

<212> PRT

<213> Homo Sapien

<400> 38

Met Glu Leu Gly Cys Trp Thr Gln Leu Gly Leu Thr Phe Leu Gln  
1 5 10 15

Leu Leu Leu Ile Ser Ser Leu Pro Arg Glu Tyr Thr Val Ile Asn  
20 25 30

Glu Ala Cys Pro Gly Ala Glu Trp Asn Ile Met Cys Arg Glu Cys  
35 40 45

Cys Glu Tyr Asp Gln Ile Glu Cys Val Cys Pro Gly Lys Arg Glu  
50 55 60

Val Val Gly Tyr Thr Ile Pro Cys Cys Arg Asn Glu Glu Asn Glu  
65 70 75

Cys Asp Ser Cys Leu Ile His Pro Gly Cys Thr Ile Phe Glu Asn  
80 85 90

Cys Lys Ser Cys Arg Asn Gly Ser Trp Gly Gly Thr Leu Asp Asp  
95 100 105

Phe Tyr Val Lys Gly Phe Tyr Cys Ala Glu Cys Arg Ala Gly Trp  
110 115 120

Tyr Gly Gly Asp Cys Met Arg Cys Gly Gln Val Leu Arg Ala Pro  
125 130 135

Lys Gly Gln Ile Leu Leu Glu Ser Tyr Pro Leu Asn Ala His Cys  
140 145 150

Glu Trp Thr Ile His Ala Lys Pro Gly Phe Val Ile Gln Leu Arg  
155 160 165

Phe Val Met Leu Ser Leu Glu Phe Asp Tyr Met Cys Gln Tyr Asp  
170 175 180

Tyr Val Glu Val Arg Asp Gly Asp Asn Arg Asp Gly Gln Ile Ile  
185 190 195

Lys Arg Val Cys Gly Asn Glu Arg Pro Ala Pro Ile Gln Ser Ile  
200 205 210

Gly Ser Ser Leu His Val Leu Phe His Ser Asp Gly Ser Lys Asn  
215 220 225

# Sequence Listing - P3230R1C1.txt

Phe Asp Gly Phe His Ala Ile Tyr Glu Glu Ile Thr Ala Cys Ser  
230 235 240

Ser Ser Pro Cys Phe His Asp Gly Thr Cys Val Leu Asp Lys Ala  
245 250 255

Gly Ser Tyr Lys Cys Ala Cys Leu Ala Gly Tyr Thr Gly Gln Arg  
260 265 270

Cys Glu Asn Leu Leu Glu Glu Arg Asn Cys Ser Asp Pro Gly Gly  
275 280 285

Pro Val Asn Gly Tyr Gln Lys Ile Thr Gly Gly Pro Gly Leu Ile  
290 295 300

Asn Gly Arg His Ala Lys Ile Gly Thr Val Val Ser Phe Phe Cys  
305 310 315

Asn Asn Ser Tyr Val Leu Ser Gly Asn Glu Lys Arg Thr Cys Gln  
320 325 330

Gln Asn Gly Glu Trp Ser Gly Lys Gln Pro Ile Cys Ile Lys Ala  
335 340 345

Cys Arg Glu Pro Lys Ile Ser Asp Leu Val Arg Arg Arg Val Leu  
350 355 360

Pro Met Gln Val Gln Ser Arg Glu Thr Pro Leu His Gln Leu Tyr  
365 370 375

Ser Ala Ala Phe Ser Lys Gln Lys Leu Gln Ser Ala Pro Thr Lys  
380 385 390

Lys Pro Ala Leu Pro Phe Gly Asp Leu Pro Met Gly Tyr Gln His  
395 400 405

Leu His Thr Gln Leu Gln Tyr Glu Cys Ile Ser Pro Phe Tyr Arg  
410 415 420

Arg Leu Gly Ser Ser Arg Arg Thr Cys Leu Arg Thr Gly Lys Trp  
425 430 435

Ser Gly Arg Ala Pro Ser Cys Ile Pro Ile Cys Gly Lys Ile Glu  
440 445 450

Asn Ile Thr Ala Pro Lys Thr Gln Gly Leu Arg Trp Pro Trp Gln  
455 460 465

Ala Ala Ile Tyr Arg Arg Thr Ser Gly Val His Asp Gly Ser Leu  
470 475 480

His Lys Gly Ala Trp Phe Leu Val Cys Ser Gly Ala Leu Val Asn  
485 490 495

Glu Arg Thr Val Val Val Ala Ala His Cys Val Thr Asp Leu Gly



Sequence Listing - P3230R1C1.txt

500 505 510

Lys Val Thr Met Ile Lys Thr Ala Asp Leu Lys Val Val Leu Gly  
515 520 525

Lys Phe Tyr Arg Asp Asp Asp Arg Asp Glu Lys Thr Ile Gln Ser  
530 535 540

Leu Gln Ile Ser Ala Ile Ile Leu His Pro Asn Tyr Asp Pro Ile  
545 550 555

Leu Leu Asp Ala Asp Ile Ala Ile Leu Lys Leu Leu Asp Lys Ala  
560 565 570

Arg Ile Ser Thr Arg Val Gln Pro Ile Cys Leu Ala Ala Ser Arg  
575 580 585

Asp Leu Ser Thr Ser Phe Gln Glu Ser His Ile Thr Val Ala Gly  
590 595 600

Trp Asn Val Leu Ala Asp Val Arg Ser Pro Gly Phe Lys Asn Asp  
605 610 615

Thr Leu Arg Ser Gly Val Val Ser Val Val Asp Ser Leu Leu Cys  
620 625 630

Glu Glu Gln His Glu Asp His Gly Ile Pro Val Ser Val Thr Asp  
635 640 645

Asn Met Phe Cys Ala Ser Trp Glu Pro Thr Ala Pro Ser Asp Ile  
650 655 660

Cys Thr Ala Glu Thr Gly Gly Ile Ala Ala Val Ser Phe Pro Gly  
665 670 675

Arg Ala Ser Pro Glu Pro Arg Trp His Leu Met Gly Leu Val Ser  
680 685 690

Trp Ser Tyr Asp Lys Thr Cys Ser His Arg Leu Ser Thr Ala Phe  
695 700 705

Thr Lys Val Leu Pro Phe Lys Asp Trp Ile Glu Arg Asn Met Lys  
710 715 720

<210> 39

<211> 2571

<212> DNA

<213> Homo Sapien

<400> 39

ggttcctaca tcctctcatc tgagaatcag agagcataat cttcttacgg 50

gcccgtgatt tattaacgtg gcttaatctg aaggttctca gtcaaattct 100

ttgtgatcta ctgattgtgg gggcatggca aggtttgctt aaaggagctt 150

Sequence Listing - P3230R1C1.txt

ggctggtttg ggcccttgta gctgacagaa ggtggccagg gagaatgcag 200  
cacactgctc ggagaatgaa ggcgcttctg ttgctgggtc tgccttggtc 250  
cagtctgct aactacattg acaatgtggg caacctgcac ttctgtatt 300  
cagaactctg taaaggtgcc tccactacg gcctgaccaa agataggaag 350  
aggcgctcac aagatggctg tccagacggc tgtgagagcc tcacagccac 400  
ggctccctcc ccagaggttt ctgcagctgc caccatctcc ttaatgacag 450  
acgagcctgg cctagacaac cctgcctacg tgtcctcggc agaggacggg 500  
cagccagcaa tcagcccagt ggactctggc cggagcaacc gaactagggc 550  
acggcccttt gagagatcca ctattagaag cagatcattt aaaaaataa 600  
atcgagcttt gagtgttctt cgaaggacaa agagcgggag tgcagttgcc 650  
aaccatgccg accagggcag ggaaaattct gaaaacacca ctgcccctga 700  
agtctttcca aggttgtagc acctgattcc agatggtgaa attaccagca 750  
tcaagatcaa tcgagtagat ccagtgaaa gcctctctat taggctggtg 800  
ggaggtagcg aaacccact ggtccatctc attatccaac acatttatcg 850  
tgatggggtg atcgccagag acggccggct actgccagga gacatcttc 900  
taaaggtcaa cgggatggac atcagcaatg tccctcacia ctacgctgtg 950  
cgtctcctgc ggcagccctg ccaggtgctg tggctgactg tgatgcgtga 1000  
acagaagttc cgcagcagga acaatggaca ggccccggat gcctacagac 1050  
cccagatga cagctttcat gtgattctca acaaaagtag ccccgaggag 1100  
cagcttgga taaaactggt gcgcaagggt gatgagcctg gggttttcat 1150  
cttcaatgtg ctggatggcg gtgtggcata tcgacatggt cagcttgagg 1200  
agaatgaccg tgtgttagcc atcaatggac atgatcttcg atatggcagc 1250  
ccagaaagtg cggctcatct gattcaggcc agtgaaagac gtgttcacct 1300  
cgtcgtgtcc cgccaggttc ggcagcggag ccctgacatc ttcaggaag 1350  
ccggctggaa cagcaatggc agctggtccc cagggccagg ggagaggagc 1400  
aacactccca agcccctcca tcctacaatt acttgtcatg agaaggtggt 1450  
aaatatccaa aaagaccccc gtgaatctct cggcatgacc gtcgcagggg 1500

Sequence Listing - P3230R1C1.txt

gagcatcaca tagagaatgg gatttgccta tctatgtcat cagtgttgag 1550  
 cccggaggag tcataagcag agatggaaga ataaaaacag gtgacatttt 1600  
 gttgaatgtg gatgggggtcg aactgacaga ggtagcccg agtgaggcag 1650  
 tggcattatt gaaaagaaca tcatcctcga tagtactcaa agctttggaa 1700  
 gtcaaagagt atgagcccca ggaagactgc agcagcccag cagccctgga 1750  
 ctccaaccac aacatggccc caccagtgga ctgggtccca tcttgggtca 1800  
 tgtggctgga attaccacgg tgcttgata actgtaaaga tattgtatta 1850  
 cgaagaaca cagctggaag tctgggcttc tgcattgtag gaggttatga 1900  
 agaatacaat ggaaacaaac ctttttcat caaatccatt gttgaaggaa 1950  
 caccagcata caatgatgga agaattagat gtggtgatat tcttctgtct 2000  
 gtcaatggta gaagtacatc aggaatgata catgcttgct tggcaagact 2050  
 gctgaaagaa cttaaaggaa gaattactct aactattgtt tcttggcctg 2100  
 gcacttttt atagaatcaa tgatgggtca gaggaaaaca gaaaaatcac 2150  
 aaataggcta agaagtgaa acactatatt tatcttgtca gttttatat 2200  
 ttaaagaaag aatacattgt aaaaatgtca ggaaaagat gatcatctaa 2250  
 tgaaagccag ttacacctca gaaaatatga ttcaaaaaa attaaaacta 2300  
 ctagttttt ttcagtgtgg aggatttctc attactctac aacattgttt 2350  
 atatttttc tattcaataa aaagccctaa aacaactaaa atgattgatt 2400  
 tgtatacccc actgaattca agctgattta aatttaaaat ttggtatatg 2450  
 ctgaagtctg ccaagggtag attatggcca ttttaattt acagctaaaa 2500  
 tattttttaa aatgcattgc tgagaaacgt tgctttcatc aaacaagaat 2550  
 aaatattttt cagaagtaa a 2571

<210> 40

<211> 632

<212> PRT

<213> Homo Sapien

<400> 40

Met	Lys	Ala	Leu	Leu	Leu	Leu	Val	Leu	Pro	Trp	Leu	Ser	Pro	Ala
1			5			10				15				

Asn	Tyr	Ile	Asp	Asn	Val	Gly	Asn	Leu	His	Phe	Leu	Tyr	Ser	Glu
		20			25				30					

Sequence Listing - P3230R1C1.txt

Leu Cys Lys Gly Ala Ser His Tyr Gly Leu Thr Lys Asp Arg Lys  
 35 40 45  
 Arg Arg Ser Gln Asp Gly Cys Pro Asp Gly Cys Ala Ser Leu Thr  
 50 55 60  
 Ala Thr Ala Pro Ser Pro Glu Val Ser Ala Ala Ala Thr Ile Ser  
 65 70 75  
 Leu Met Thr Asp Glu Pro Gly Leu Asp Asn Pro Ala Tyr Val Ser  
 80 85 90  
 Ser Ala Glu Asp Gly Gln Pro Ala Ile Ser Pro Val Asp Ser Gly  
 95 100 105  
 Arg Ser Asn Arg Thr Arg Ala Arg Pro Phe Glu Arg Ser Thr Ile  
 110 115 120  
 Arg Ser Arg Ser Phe Lys Lys Ile Asn Arg Ala Leu Ser Val Leu  
 125 130 135  
 Arg Arg Thr Lys Ser Gly Ser Ala Val Ala Asn His Ala Asp Gln  
 140 145 150  
 Gly Arg Glu Asn Ser Glu Asn Thr Thr Ala Pro Glu Val Phe Pro  
 155 160 165  
 Arg Leu Tyr His Leu Ile Pro Asp Gly Glu Ile Thr Ser Ile Lys  
 170 175 180  
 Ile Asn Arg Val Asp Pro Ser Glu Ser Leu Ser Ile Arg Leu Val  
 185 190 195  
 Gly Gly Ser Glu Thr Pro Leu Val His Ile Ile Ile Gln His Ile  
 200 205 210  
 Tyr Arg Asp Gly Val Ile Ala Arg Asp Gly Arg Leu Leu Pro Gly  
 215 220 225  
 Asp Ile Ile Leu Lys Val Asn Gly Met Asp Ile Ser Asn Val Pro  
 230 235 240  
 His Asn Tyr Ala Val Arg Leu Leu Arg Gln Pro Cys Gln Val Leu  
 245 250 255  
 Trp Leu Thr Val Met Arg Glu Gln Lys Phe Arg Ser Arg Asn Asn  
 260 265 270  
 Gly Gln Ala Pro Asp Ala Tyr Arg Pro Arg Asp Asp Ser Phe His  
 275 280 285  
 Val Ile Leu Asn Lys Ser Ser Pro Glu Glu Gln Leu Gly Ile Lys  
 290 295 300

Sequence Listing - P3230R1C1.txt

Leu Val Arg Lys Val Asp Glu Pro Gly Val Phe Ile Phe Asn Val  
305 310 315

Leu Asp Gly Gly Val Ala Tyr Arg His Gly Gln Leu Glu Glu Asn  
320 325 330

Asp Arg Val Leu Ala Ile Asn Gly His Asp Leu Arg Tyr Gly Ser  
335 340 345

Pro Glu Ser Ala Ala His Leu Ile Gln Ala Ser Glu Arg Arg Val  
350 355 360

His Leu Val Val Ser Arg Gln Val Arg Gln Arg Ser Pro Asp Ile  
365 370 375

Phe Gln Glu Ala Gly Trp Asn Ser Asn Gly Ser Trp Ser Pro Gly  
380 385 390

Pro Gly Glu Arg Ser Asn Thr Pro Lys Pro Leu His Pro Thr Ile  
395 400 405

Thr Cys His Glu Lys Val Val Asn Ile Gln Lys Asp Pro Gly Glu  
410 415 420

Ser Leu Gly Met Thr Val Ala Gly Gly Ala Ser His Arg Glu Trp  
425 430 435

Asp Leu Pro Ile Tyr Val Ile Ser Val Glu Pro Gly Gly Val Ile  
440 445 450

Ser Arg Asp Gly Arg Ile Lys Thr Gly Asp Ile Leu Leu Asn Val  
455 460 465

Asp Gly Val Glu Leu Thr Glu Val Ser Arg Ser Glu Ala Val Ala  
470 475 480

Leu Leu Lys Arg Thr Ser Ser Ser Ile Val Leu Lys Ala Leu Glu  
485 490 495

Val Lys Glu Tyr Glu Pro Gln Glu Asp Cys Ser Ser Pro Ala Ala  
500 505 510

Leu Asp Ser Asn His Asn Met Ala Pro Pro Ser Asp Trp Ser Pro  
515 520 525

Ser Trp Val Met Trp Leu Glu Leu Pro Arg Cys Leu Tyr Asn Cys  
530 535 540

Lys Asp Ile Val Leu Arg Arg Asn Thr Ala Gly Ser Leu Gly Phe  
545 550 555

Cys Ile Val Gly Gly Tyr Glu Glu Tyr Asn Gly Asn Lys Pro Phe  
560 565 570

Phe Ile Lys Ser Ile Val Glu Gly Thr Pro Ala Tyr Asn Asp Gly

Sequence Listing - P3230R1C1.txt

575 580 585

Arg Ile Arg Cys Gly Asp Ile Leu Leu Ala Val Asn Gly Arg Ser  
590 595 600

Thr Ser Gly Met Ile His Ala Cys Leu Ala Arg Leu Leu Lys Glu  
605 610 615

Leu Lys Gly Arg Ile Thr Leu Thr Ile Val Ser Trp Pro Gly Thr  
620 625 630

Phe Leu

<210> 41

<211> 1964

<212> DNA

<213> Homo Sapien

<400> 41

accaggcatt gtatcttcag ttgtcatcaa gttcgcaatc agattggaaa 50  
agctcaactt gaagctttct tgcctgcagt gaagcagaga gatagatatt 100  
attcacgtaa taaaaaacat gggcttcaac ctgactttcc acctttccta 150  
caaattccga ttactgttgc tgttgacttt gtgcctgaca gtggttgggt 200  
gggccaccag taactacttc gtgggtgcca ttcaagagat tcctaaagca 250  
aaggagttca tggctaattt ccataagacc ctcattttgg ggaagggaaa 300  
aactctgact aatgaagcat ccacgaagaa ggtagaactt gacaactgtc 350  
cttctgtgtc tccttacctc agaggccaga gcaagctcat tttcaaacca 400  
gatctcactt tggaagaggt acaggcagaa aatcccaaag tgtccagagg 450  
ccggtatcgc ctcaggaat gtaaagcttt acagaggggtc gccatcctcg 500  
ttccccaccg gaacagagag aaacacctga tgtacctgct ggaacatctg 550  
catcccttcc tgcaaggga gcaagctggat tatggcatct acgtcatcca 600  
ccaggctgaa ggtaaaaagt ttaatcgagc caaactcttg aatgtgggct 650  
atctagaagc cctcaaggaa gaaaattggg actgctttat attccacgat 700  
gtggacctgg tacccgagaa tgactttaac ctttacaagt gtgaggagca 750  
tccaagcat ctggtggttg gcaggaacag cactgggtac aggttacgtt 800  
acagtggata ttttgggggt gttactgcc taagcagaga gcagtttttc 850  
aaggatgaat gattctctaa caactactgg ggatggggag gcgaagacga 900

Sequence Listing - P3230R1C1.txt

tgacctcaga ctcaggggtg agctccaaag aatgaaaatt tcccggcccc 950  
 tgcctgaagt gggtaaatat acaatggtct tccacactag agacaaaggc 1000  
 aatgaggtga acgcagaacg gatgaagctc ttacaccaag tgtcacgagt 1050  
 ctggagaaca gatgggttga gtagttgttc ttataaatta gtatctgtgg 1100  
 aacacaatcc tttatatatc aacatcacag tggatttctg gtttggtgca 1150  
 tgacctgga tcttttggtg atgtttggaa gaactgattc tttgtttgca 1200  
 ataattttgg cctagagact tcaaatagta gcacacatta agaacctgtt 1250  
 acagctcatt gttgagctga attttcctt tttgtatttt cttagcagag 1300  
 ctctggtga tgtagagtat aaaacagttg taacaagaca gctttcttag 1350  
 tcattttgat catgaggggtt aaatattgta atatggatac ttgaaggact 1400  
 ttatataaaa ggatgactca aaggataaaa tgaacgctat ttgaggactc 1450  
 tggttgaagg agatttattt aaattgaag taatatatta tgggataaaa 1500  
 ggccacagga aataagactg ctgaatgtct gagagaacca gagttgttct 1550  
 cgtccaaggt agaaaggtag gaagatacaa tactgttatt catttatcct 1600  
 gtacaatcat ctgtgaagtg gtggtgtcag gtgagaaggc gtccacaaaa 1650  
 gaggggagaa aaggcgacga atcaggacac agtgaacttg ggaatgaaga 1700  
 ggtagcagga ggggtgagtg tcggctgcaa aggcagcagt agctgagctg 1750  
 gttgcaggtg ctgatagcct tcaggggagg acctgcccag gtatgccttc 1800  
 cagtgatgcc caccagagaa tacattctct attagttttt aaagagtttt 1850  
 tgtaaaatga tttgtacaa gtaggatatg aattagcagt ttacaagttt 1900  
 acatattaac taataataaa tatgtctatc aaatacctct gtagtaaaat 1950  
 gtgaaaaagc aaaa 1964

<210> 42

<211> 344

<212> PRT

<213> Homo Sapien

<400> 42

Met Gly Phe Asn Leu Thr Phe His Leu Ser Tyr Lys Phe Arg Leu

1 5 10 15

Leu Leu Leu Leu Thr Leu Cys Leu Thr Val Val Gly Trp Ala Thr

20 25 30

# Sequence Listing - P3230R1C1.txt

Ser Asn Tyr Phe Val Gly Ala Ile Gln Glu Ile Pro Lys Ala Lys  
 35 40 45  
 Glu Phe Met Ala Asn Phe His Lys Thr Leu Ile Leu Gly Lys Gly  
 50 55 60  
 Lys Thr Leu Thr Asn Glu Ala Ser Thr Lys Lys Val Glu Leu Asp  
 65 70 75  
 Asn Cys Pro Ser Val Ser Pro Tyr Leu Arg Gly Gln Ser Lys Leu  
 80 85 90  
 Ile Phe Lys Pro Asp Leu Thr Leu Glu Glu Val Gln Ala Glu Asn  
 95 100 105  
 Pro Lys Val Ser Arg Gly Arg Tyr Arg Pro Gln Glu Cys Lys Ala  
 110 115 120  
 Leu Gln Arg Val Ala Ile Leu Val Pro His Arg Asn Arg Glu Lys  
 125 130 135  
 His Leu Met Tyr Leu Leu Glu His Leu His Pro Phe Leu Gln Arg  
 140 145 150  
 Gln Gln Leu Asp Tyr Gly Ile Tyr Val Ile His Gln Ala Glu Gly  
 155 160 165  
 Lys Lys Phe Asn Arg Ala Lys Leu Leu Asn Val Gly Tyr Leu Glu  
 170 175 180  
 Ala Leu Lys Glu Glu Asn Trp Asp Cys Phe Ile Phe His Asp Val  
 185 190 195  
 Asp Leu Val Pro Glu Asn Asp Phe Asn Leu Tyr Lys Cys Glu Glu  
 200 205 210  
 His Pro Lys His Leu Val Val Gly Arg Asn Ser Thr Gly Tyr Arg  
 215 220 225  
 Leu Arg Tyr Ser Gly Tyr Phe Gly Gly Val Thr Ala Leu Ser Arg  
 230 235 240  
 Glu Gln Phe Phe Lys Val Asn Gly Phe Ser Asn Asn Tyr Trp Gly  
 245 250 255  
 Trp Gly Gly Glu Asp Asp Asp Leu Arg Leu Arg Val Glu Leu Gln  
 260 265 270  
 Arg Met Lys Ile Ser Arg Pro Leu Pro Glu Val Gly Lys Tyr Thr  
 275 280 285  
 Met Val Phe His Thr Arg Asp Lys Gly Asn Glu Val Asn Ala Glu  
 290 295 300



Sequence Listing - P3230R1C1.txt

Arg Met Lys Leu Leu His Gln Val Ser Arg Val Trp Arg Thr Asp  
305 310 315

Gly Leu Ser Ser Cys Ser Tyr Lys Leu Val Ser Val Glu His Asn  
320 325 330

Pro Leu Tyr Ile Asn Ile Thr Val Asp Phe Trp Phe Gly Ala  
335 340

<210> 43

<211> 485

<212> DNA

<213> Homo Sapien

<400> 43

gctcaagacc cagcagtggg acagccagac agacggcacg atggcactga 50

gctcccagat ctgggccgct tgctctctgc tctctctct cctcgccagc 100

ctgaccagtg gctctgtttt cccacaacag acgggacaac ttgcagagct 150

gcaaccccag gacagagctg gagccagggc cagctggatg cccatgttcc 200

agaggcgaag gaggcgagac acccacttcc ccatctgcat tttctgctgc 250

ggctgctgtc atcgatcaaa gtgtgggatg tgctgcaaga cgtagaacct 300

acctgcctg ccccgctccc ctccttctct tatttattcc tgctgcccc 350

gaacataggt cttggaataa aatggctggt tctttgttt tcaaaaaaaaa 400

aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 450

aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaa 485

<210> 44

<211> 84

<212> PRT

<213> Homo Sapien

<400> 44

Met Ala Leu Ser Ser Gln Ile Trp Ala Ala Cys Leu Leu Leu Leu  
1 5 10 15

Leu Leu Leu Ala Ser Leu Thr Ser Gly Ser Val Phe Pro Gln Gln  
20 25 30

Thr Gly Gln Leu Ala Glu Leu Gln Pro Gln Asp Arg Ala Gly Ala  
35 40 45

Arg Ala Ser Trp Met Pro Met Phe Gln Arg Arg Arg Arg Arg Asp  
50 55 60

Thr His Phe Pro Ile Cys Ile Phe Cys Cys Gly Cys Cys His Arg  
65 70 75

Sequence Listing - P3230R1C1.txt

Ser Lys Cys Gly Met Cys Cys Lys Thr  
80

<210> 45

<211> 1076

<212> DNA

<213> Homo Sapien

<400> 45

gtggcttcat ttcatgtggct gacttccaga gagcaatatg gctggttccc 50  
caacatgcct caccctcatc tatatccttt ggcagctcac agggtcagca 100  
gcctctggac ccgtgaaaga gctggtcggt tccgttgggtg gggccgtgac 150  
tttccccctg aagtccaaag taaagcaagt tgactctatt gtctggacct 200  
tcaacacaac cctcttgtc accatacagc cagaaggggg cactatcata 250  
gtgacccaaa atcgtaatag ggagagagta gacttcccag atggaggcta 300  
ctcctgaag ctacgcaaac tgaagaagaa tgactcaggg atctactatg 350  
tggggatata cagctcatca ctccagcagc cctccacca ggagtacgtg 400  
ctgcatgtct acgagcacct gtcaaagcct aaagtcacca tgggtctgca 450  
gagcaataag aatggcacct gtgtgaccaa tctgacatgc tgcattggaac 500  
atggggaaga ggatgtgatt tatacctgga aggcctggg gcaagcagcc 550  
aatgagtccc ataatgggtc catcctccc atctcctgga gatggggaga 600  
aagtgatatg accttcatct gcgttgccag gaaccctgtc agcagaaaact 650  
tctcaagccc catccttgcc aggaagctct gtgaagggtc tgctgatgac 700  
ccagattcct ccatggctct cctgtgtctc ctgttgggtc ccctcctgct 750  
cagtctcttt gtactggggc tatttcttg gtttctgaag agagagagac 800  
aagaagagta cattgaagag aagaagagag tggacatttg tcgggaaact 850  
cctaacatat gccccattc tggagagaac acagagtacg acacaatccc 900  
tcacactaat agaacaatcc taaaggaaga tccagcaaata acggtttact 950  
ccactgtgga aataccgaaa aagatggaaa atccccactc actgctcacg 1000  
atgccagaca caccaagggt atttgcctat gagaatgtta tctagacagc 1050  
agtgactccc cctaagtctc tgctca 1076

<210> 46

Sequence Listing - P3230R1C1.txt

<211> 335

<212> PRT

<213> Homo Sapien

<400> 46

Met Ala Gly Ser Pro Thr Cys Leu Thr Leu Ile Tyr Ile Leu Trp  
1 5 10 15

Gln Leu Thr Gly Ser Ala Ala Ser Gly Pro Val Lys Glu Leu Val  
20 25 30  
Gly Ser Val Gly Gly Ala Val Thr Phe Pro Leu Lys Ser Lys Val  
35 40 45

Lys Gln Val Asp Ser Ile Val Trp Thr Phe Asn Thr Thr Pro Leu  
50 55 60

Val Thr Ile Gln Pro Glu Gly Gly Thr Ile Ile Val Thr Gln Asn  
65 70 75

Arg Asn Arg Glu Arg Val Asp Phe Pro Asp Gly Gly Tyr Ser Leu  
80 85 90

Lys Leu Ser Lys Leu Lys Lys Asn Asp Ser Gly Ile Tyr Tyr Val  
95 100 105

Gly Ile Tyr Ser Ser Ser Leu Gln Gln Pro Ser Thr Gln Glu Tyr  
110 115 120

Val Leu His Val Tyr Glu His Leu Ser Lys Pro Lys Val Thr Met  
125 130 135

Gly Leu Gln Ser Asn Lys Asn Gly Thr Cys Val Thr Asn Leu Thr  
140 145 150

Cys Cys Met Glu His Gly Glu Glu Asp Val Ile Tyr Thr Trp Lys  
155 160 165

Ala Leu Gly Gln Ala Ala Asn Glu Ser His Asn Gly Ser Ile Leu  
170 175 180

Pro Ile Ser Trp Arg Trp Gly Glu Ser Asp Met Thr Phe Ile Cys  
185 190 195

Val Ala Arg Asn Pro Val Ser Arg Asn Phe Ser Ser Pro Ile Leu  
200 205 210

Ala Arg Lys Leu Cys Glu Gly Ala Ala Asp Asp Pro Asp Ser Ser  
215 220 225

Met Val Leu Leu Cys Leu Leu Leu Val Pro Leu Leu Leu Ser Leu  
230 235 240

Phe Val Leu Gly Leu Phe Leu Trp Phe Leu Lys Arg Glu Arg Gln  
245 250 255

Sequence Listing - P3230R1C1.txt

Glu Glu Tyr Ile Glu Glu Lys Lys Arg Val Asp Ile Cys Arg Glu  
260 265 270

Thr Pro Asn Ile Cys Pro His Ser Gly Glu Asn Thr Glu Tyr Asp  
275 280 285

Thr Ile Pro His Thr Asn Arg Thr Ile Leu Lys Glu Asp Pro Ala  
290 295 300

Asn Thr Val Tyr Ser Thr Val Glu Ile Pro Lys Lys Met Glu Asn  
305 310 315

Pro His Ser Leu Leu Thr Met Pro Asp Thr Pro Arg Leu Phe Ala  
320 325 330

Tyr Glu Asn Val Ile  
335

<210> 47

<211> 766

<212> DNA

<213> Homo Sapien

<400> 47

ggctcgagcg ttctgagcc aggggtgacc atgacctgct gcgaaggatg 50

gacatcctgc aatggattca gcctgctggt tctactgctg ttaggagtag 100

ttctcaatgc gatacctcta attgtcagct tagttgagga agaccaattt 150

tctcaaaacc ccatctcttg ctttgagtgg tggttcccag gaattatagg 200

agcaggctctg atggccattc cagcaacaac aatgtccttg acagcaagaa 250

aaagagcgtg ctgcaacaac agaactggaa tgtttcttc atcatttttc 300

agtgtgatca cagtcattgg tgctctgtat tgcattgctga tatccatcca 350

ggctctctta aaaggctctc tcatgtgtaa ttctcaagc aacagtaatg 400

ccaattgtga attttcattg aaaaacatca gtgacattca tccagaatcc 450

ttcaacttgc agtgggtttt caatgactct tgtgcacctc ctactggttt 500

caataaacc accagtaacg acaccatggc gagtggctgg agagcatcta 550

gtttccactt cgattctgaa gaaaacaaac ataggcttat ccacttctca 600

gtatttttag gtctattgct tgttggaatt ctggaggctc tgtttgggct 650

cagtcagata gtcacgggtt tccttgctg tctgtgtgga gtctctaagc 700

gaagaagtca aattgtgtag ttaaatggga ataaatgta agtatcagta 750

gtttgaaaaa aaaaaa 766

# Sequence Listing - P3230R1C1.txt

<210> 48

<211> 229

<212> PRT

<213> Homo Sapien

<400> 48

Met Thr Cys Cys Glu Gly Trp Thr Ser Cys Asn Gly Phe Ser Leu  
1 5 10 15

Leu Val Leu Leu Leu Leu Gly Val Val Leu Asn Ala Ile Pro Leu  
20 25 30

Ile Val Ser Leu Val Glu Glu Asp Gln Phe Ser Gln Asn Pro Ile  
35 40 45

Ser Cys Phe Glu Trp Trp Phe Pro Gly Ile Ile Gly Ala Gly Leu  
50 55 60

Met Ala Ile Pro Ala Thr Thr Met Ser Leu Thr Ala Arg Lys Arg  
65 70 75

Ala Cys Cys Asn Asn Arg Thr Gly Met Phe Leu Ser Ser Phe Phe  
80 85 90

Ser Val Ile Thr Val Ile Gly Ala Leu Tyr Cys Met Leu Ile Ser  
95 100 105

Ile Gln Ala Leu Leu Lys Gly Pro Leu Met Cys Asn Ser Pro Ser  
110 115 120

Asn Ser Asn Ala Asn Cys Glu Phe Ser Leu Lys Asn Ile Ser Asp  
125 130 135

Ile His Pro Glu Ser Phe Asn Leu Gln Trp Phe Phe Asn Asp Ser  
140 145 150

Cys Ala Pro Pro Thr Gly Phe Asn Lys Pro Thr Ser Asn Asp Thr  
155 160 165

Met Ala Ser Gly Trp Arg Ala Ser Ser Phe His Phe Asp Ser Glu  
170 175 180

Glu Asn Lys His Arg Leu Ile His Phe Ser Val Phe Leu Gly Leu  
185 190 195

Leu Leu Val Gly Ile Leu Glu Val Leu Phe Gly Leu Ser Gln Ile  
200 205 210

Val Ile Gly Phe Leu Gly Cys Leu Cys Gly Val Ser Lys Arg Arg  
215 220 225

Ser Gln Ile Val

# Sequence Listing - P3230R1C1.txt

<210> 49

<211> 636

<212> DNA

<213> Homo Sapien

<400> 49

atccgttctc tgcgctgccca gctcagggtga gccctcgcca aggtgacctc 50

gcaggacact ggtgaaggag cagtgaggaa cctgcagagt cacacagttg 100

ctgaccaatt gagctgtgag cctggagcag atccgtgggc tgcagacccc 150

cgccccagtg cctctcccc tgcagccctg cccctcgaac tgtgacatgg 200

agagagtgac cctggccctt ctctactgg caggcctgac tgccttgga 250

gccaatgacc catttgccaa taaagacgat ccttctact atgactggaa 300

aaacctgcag ctgagcggac tgatctgcgg agggctctg gccattgctg 350

ggatcgcggc agttctgagt ggcaaatgca aatacaagag cagccagaag 400

cagcacagtc ctgtacctga gaaggccatc ccactcatca ctccaggctc 450

tgccactact tgctgagcac aggactggcc tccagggatg gcctgaagcc 500

taactctggc cccagcacc tctcccctg ggaggccta tctcaagga 550

aggacttctc tccaagggca ggctgttagg ccccttctg atcaggaggc 600

ttctttatga attaaactcg cccaccacc ccctca 636

<210> 50

<211> 89

<212> PRT

<213> Homo Sapien

<400> 50

Met Glu Arg Val Thr Leu Ala Leu Leu Leu Ala Gly Leu Thr

1 5 10 15

Ala Leu Glu Ala Asn Asp Pro Phe Ala Asn Lys Asp Asp Pro Phe

20 25 30

Tyr Tyr Asp Trp Lys Asn Leu Gln Leu Ser Gly Leu Ile Cys Gly

35 40 45

Gly Leu Leu Ala Ile Ala Gly Ile Ala Ala Val Leu Ser Gly Lys

50 55 60

Cys Lys Tyr Lys Ser Ser Gln Lys Gln His Ser Pro Val Pro Glu

65 70 75

Lys Ala Ile Pro Leu Ile Thr Pro Gly Ser Ala Thr Thr Cys

80 85

Sequence Listing - P3230R1C1.txt

<210> 51

<211> 1734

<212> DNA

<213> Homo Sapien

<400> 51

gtggactctg agaagcccag gcagttgagg acaggagaga gaaggctgca 50  
gaccagagg gagggaggac agggagtcgg aaggaggagg acagaggagg 100  
gcacagagac gcagagcaag ggcggcaagg aggagaccct ggtgggagga 150  
agacactctg gagagagagg gggctgggca gagatgaagt tccaggggcc 200  
cctggcctgc ctctgctgg ccctctgcct gggcagtggg gaggctggcc 250  
ccctgcagag cggagaggaa agcactggga caaatattgg ggaggccctt 300  
ggacatggcc tgggagacgc cctgagcgaa ggggtgggaa aggccattgg 350  
caaagaggcc ggaggggag ctggctctaa agtcagttag gcccttggcc 400  
aagggaccag agaagcagtt ggcactggag tcaggcaggt tccaggcttt 450  
ggcgagcag atgctttggg caacagggtc ggggaagcag cccatgctct 500  
gggaaacact gggcacgaga ttggcagaca ggcagaagat gtcattcgac 550  
acggagcaga tgctgtccgc ggctcctggc aggggggtgcc tggccacagt 600  
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ccttgagggc cagggccagg gcaatcctgg aggtctgggg actccgtggg 700  
tccacggata ccccggaac tcagcaggca gctttggaat gaatcctcag 750  
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caacactcag ggagctgtgg ccagcctgg ctatggttca gtgagagcca 850  
gcaaccagaa tgaaggggtgc acgaatcccc caccatctgg ctcaggtgga 900  
ggctccagca actctggggg aggcagcggc tcacagtcgg gcagcagtg 950  
cagtggcagc aatggtgaca acaacaatgg cagcagcagt ggtggcagca 1000  
gcagtggcag cagcagtggc agcagcagtg gcggcagcag tggcggcagc 1050  
agtgggtggc gcagtggcaa cagtgggtggc agcagaggtg acagcggcag 1100  
tgagtctctc tggggatcca gcaccggctc ctctccggc aaccacgggtg 1150  
ggagcggcgg aggaaatgga cataaacccg ggtgtgaaaa gccagggaat 1200  
gaagcccgcg ggagcgggga atctgggatt cagggttca gaggacaggg 1250

Sequence Listing - P3230R1C1.txt

agtttccagc aacatgaggg aaataagcaa agaggggcaat cgcttccttg 1300  
gaggctctgg agacaattat cggggggcaag ggtcgagctg gggcagtgga 1350  
ggaggtgacg ctgttggtgg agtcaatact gtgaactctg agacgtctcc 1400  
tgggatgttt aactttgaca ctttctggaa gaattttaaa tccaagctgg 1450  
gtttcatcaa ctgggatgcc ataaacaagg accagagaag ctctcgcac 1500  
ccgtgacctc cagacaagga gccaccagat tggatgggag cccccacact 1550  
ccctccttaa aacaccaccc tctcatcact aatctcagcc cttgcccttg 1600  
aaataaacct tagctgcccc acaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 1650  
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 1700  
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaa 1734

<210> 52

<211> 440

<212> PRT

<213> Homo Sapien

<400> 52

Met Lys Phe Gln Gly Pro Leu Ala Cys Leu Leu Leu Ala Leu Cys  
1 5 10 15

Leu Gly Ser Gly Glu Ala Gly Pro Leu Gln Ser Gly Glu Glu Ser  
20 25 30

Thr Gly Thr Asn Ile Gly Glu Ala Leu Gly His Gly Leu Gly Asp  
35 40 45  
Ala Leu Ser Gly Val Gly Lys Ala Ile Gly Lys Glu Ala Gly  
50 55 60

Gly Ala Ala Gly Ser Lys Val Ser Glu Ala Leu Gly Gln Gly Thr  
65 70 75

Arg Glu Ala Val Gly Thr Gly Val Arg Gln Val Pro Gly Phe Gly  
80 85 90

Ala Ala Asp Ala Leu Gly Asn Arg Val Gly Glu Ala Ala His Ala  
95 100 105

Leu Gly Asn Thr Gly His Glu Ile Gly Arg Gln Ala Glu Asp Val  
110 115 120

Ile Arg His Gly Ala Asp Ala Val Arg Gly Ser Trp Gln Gly Val  
125 130 135

Pro Gly His Ser Gly Ala Trp Glu Thr Ser Gly Gly His Gly Ile  
140 145 150



Sequence Listing - P3230R1C1.txt

Phe Gly Ser Gln Gly Gly Leu Gly Gly Gln Gly Gln Gly Asn Pro  
 155 160 165  
 Gly Gly Leu Gly Thr Pro Trp Val His Gly Tyr Pro Gly Asn Ser  
 170 175 180  
 Ala Gly Ser Phe Gly Met Asn Pro Gln Gly Ala Pro Trp Gly Gln  
 185 190 195  
 Gly Gly Asn Gly Gly Pro Pro Asn Phe Gly Thr Asn Thr Gln Gly  
 200 205 210  
 Ala Val Ala Gln Pro Gly Tyr Gly Ser Val Arg Ala Ser Asn Gln  
 215 220 225  
 Asn Glu Gly Cys Thr Asn Pro Pro Pro Ser Gly Ser Gly Gly Gly  
 230 235 240  
 Ser Ser Asn Ser Gly Gly Gly Ser Gly Ser Gln Ser Gly Ser Ser  
 245 250 255  
 Gly Ser Gly Ser Asn Gly Asp Asn Asn Asn Gly Ser Ser Ser Gly  
 260 265 270  
 Gly Ser Ser Ser Gly Ser Ser Ser Gly Ser Ser Ser Gly Gly Ser  
 275 280 285  
 Ser Gly Gly Ser Ser Gly Gly Ser Ser Gly Asn Ser Gly Gly Ser  
 290 295 300  
 Arg Gly Asp Ser Gly Ser Glu Ser Ser Trp Gly Ser Ser Thr Gly  
 305 310 315  
 Ser Ser Ser Gly Asn His Gly Gly Ser Gly Gly Gly Asn Gly His  
 320 325 330  
 Lys Pro Gly Cys Glu Lys Pro Gly Asn Glu Ala Arg Gly Ser Gly  
 335 340 345  
 Glu Ser Gly Ile Gln Gly Phe Arg Gly Gln Gly Val Ser Ser Asn  
 350 355 360  
 Met Arg Glu Ile Ser Lys Glu Gly Asn Arg Leu Leu Gly Gly Ser  
 365 370 375  
 Gly Asp Asn Tyr Arg Gly Gln Gly Ser Ser Trp Gly Ser Gly Gly  
 380 385 390  
 Gly Asp Ala Val Gly Gly Val Asn Thr Val Asn Ser Glu Thr Ser  
 395 400 405  
 Pro Gly Met Phe Asn Phe Asp Thr Phe Trp Lys Asn Phe Lys Ser  
 410 415 420

Sequence Listing - P3230R1C1.txt

Lys Leu Gly Phe Ile Asn Trp Asp Ala Ile Asn Lys Asp Gln Arg  
425 430 435

Ser Ser Arg Ile Pro  
440

<210> 53  
<211> 1676  
<212> DNA  
<213> Homo Sapien

<400> 53  
ggagaagagg ttgtgtggga caagctgctc ccgacagaag gatgtcgctg 50  
ctgagcctgc cctggctggg cctcagaccg gtggcaatgt ccccatggct 100  
actcctgctg ctggttgtgg gctcctggct actcgccgc atcctggctt 150  
ggacctatgc cttctataac aactgccgcc ggctccagtg tttccacag 200  
ccccaaaac ggaactggtt ttgggggtcac ctgggcctga tcactctac 250  
agaggagggc ttgaaggact cgaccagat gtcggccacc tattccagg 300  
gctttacggt atggctgggt cccatcatcc ctttcctgt tttatgccac 350  
cctgacacca tccggtctat caccaatgcc tcagctgcca ttgcaccaa 400  
ggataatctc ttcacaggt tctgaagcc ctggctggga gaagggatac 450  
tgctgagtgg cggtgacaag tggagccgcc accgtcggat gctgacgcc 500  
gccttcatt tcaacatcct gaagtctat ataacgatct tcaacaagag 550  
tgcaaacatc atgcttgaca agtggcagca cctggcctca gagggcagca 600  
gtcgtctgga catgtttgag cacatcagcc tcatgacctt ggacagtcta 650  
cagaaatgca tcttcagctt tgacagccat tgtcaggaga ggcccagtga 700  
atatattgcc accatcttgg agctcagtgc cttgtagag aaaagaagcc 750  
agcatatcct ccagcacatg gactttctgt attacctctc ccatgacggg 800  
cggcgcttcc acagggcctg ccgcctgggt catgacttca cagacgctgt 850  
catccgggag cggcgtcgca cctccccac tcagggtatt gatgattttt 900  
tcaaagacaa agccaagtcc aagactttgg atttcattga tgtgcttctg 950  
ctgagcaagg atgaagatgg gaaggcattg tcagatgagg atataagagc 1000  
agaggctgac acctcatgt ttggaggcca tgacaccacg gccagtggcc 1050  
tctcctgggt cctgtacaac cttgcgaggc acccagaata ccaggagcgc 1100

Sequence Listing - P3230R1C1.txt

tgccgacagg aggtgcaaga gcttctgaag gaccgcgac ctaaagagat 1150  
 tgaatgggac gacctggccc agctgccctt cctgaccatg tgcgtgaagg 1200  
 agagcctgag gttacatccc ccagctccct tcattctccg atgctgcacc 1250  
 caggacattg ttctcccaga tggccgagtc atcccaaag gcattacctg 1300  
 cctcatcgat attatagggg tccatcaca ccaactgtg tggccggatc 1350  
 ctgagggtcta cgacccttc cgctttgacc cagagaacag caaggggagg 1400  
 tcacctctgg cttttattcc ttctccgca gggcccagga actgcatcgg 1450  
 gcaggcggtc gccatggcgg agatgaaagt ggtcctggcg ttgatgctgc 1500  
 tgcacttccg gttctgccca gaccacctg agccccgcag gaagctggaa 1550  
 ttgatcatgc gcgccgaggg cgggctttgg ctgcgggtgg agcccctgaa 1600  
 tgtaggcttg cagtgacttt ctgaccatc cacctgtttt tttgcagatt 1650  
 gtcataaata aaacgggtgct gtcaaa 1676

<210> 54

<211> 524

<212> PRT

<213> Homo Sapien

<400> 54

Met Ser Leu Leu Ser Leu Pro Trp Leu Gly Leu Arg Pro Val Ala  
 1 5 10 15

Met Ser Pro Trp Leu Leu Leu Leu Val Val Gly Ser Trp Leu  
 20 25 30

Leu Ala Arg Ile Leu Ala Trp Thr Tyr Ala Phe Tyr Asn Asn Cys  
 35 40 45

Arg Arg Leu Gln Cys Phe Pro Gln Pro Pro Lys Arg Asn Trp Phe  
 50 55 60

Trp Gly His Leu Gly Leu Ile Thr Pro Thr Glu Glu Gly Leu Lys  
 65 70 75

Asp Ser Thr Gln Met Ser Ala Thr Tyr Ser Gln Gly Phe Thr Val  
 80 85 90

Trp Leu Gly Pro Ile Ile Pro Phe Ile Val Leu Cys His Pro Asp  
 95 100 105

Thr Ile Arg Ser Ile Thr Asn Ala Ser Ala Ala Ile Ala Pro Lys  
 110 115 120

Asp Asn Leu Phe Ile Arg Phe Leu Lys Pro Trp Leu Gly Glu Gly  
 125 130 135

# Sequence Listing - P3230R1C1.txt

Ile Leu Leu Ser Gly Gly Asp Lys Trp Ser Arg His Arg Arg Met  
140 145 150

Leu Thr Pro Ala Phe His Phe Asn Ile Leu Lys Ser Tyr Ile Thr  
155 160 165

Ile Phe Asn Lys Ser Ala Asn Ile Met Leu Asp Lys Trp Gln His  
170 175 180

Leu Ala Ser Glu Gly Ser Ser Arg Leu Asp Met Phe Glu His Ile  
185 190 195

Ser Leu Met Thr Leu Asp Ser Leu Gln Lys Cys Ile Phe Ser Phe  
200 205 210

Asp Ser His Cys Gln Glu Arg Pro Ser Glu Tyr Ile Ala Thr Ile  
215 220 225

Leu Glu Leu Ser Ala Leu Val Glu Lys Arg Ser Gln His Ile Leu  
230 235 240

Gln His Met Asp Phe Leu Tyr Tyr Leu Ser His Asp Gly Arg Arg  
245 250 255

Phe His Arg Ala Cys Arg Leu Val His Asp Phe Thr Asp Ala Val  
260 265 270

Ile Arg Glu Arg Arg Arg Thr Leu Pro Thr Gln Gly Ile Asp Asp  
275 280 285

Phe Phe Lys Asp Lys Ala Lys Ser Lys Thr Leu Asp Phe Ile Asp  
290 295 300

Val Leu Leu Leu Ser Lys Asp Glu Asp Gly Lys Ala Leu Ser Asp  
305 310 315

Glu Asp Ile Arg Ala Glu Ala Asp Thr Phe Met Phe Gly Gly His  
320 325 330

Asp Thr Thr Ala Ser Gly Leu Ser Trp Val Leu Tyr Asn Leu Ala  
335 340 345

Arg His Pro Glu Tyr Gln Glu Arg Cys Arg Gln Glu Val Gln Glu  
350 355 360

Leu Leu Lys Asp Arg Asp Pro Lys Glu Ile Glu Trp Asp Asp Leu  
365 370 375

Ala Gln Leu Pro Phe Leu Thr Met Cys Val Lys Glu Ser Leu Arg  
380 385 390

Leu His Pro Pro Ala Pro Phe Ile Ser Arg Cys Cys Thr Gln Asp  
395 400 405

Sequence Listing - P3230R1C1.txt

Ile Val Leu Pro Asp Gly Arg Val Ile Pro Lys Gly Ile Thr Cys  
410 415 420

Leu Ile Asp Ile Ile Gly Val His His Asn Pro Thr Val Trp Pro  
425 430 435

Asp Pro Glu Val Tyr Asp Pro Phe Arg Phe Asp Pro Glu Asn Ser  
440 445 450

Lys Gly Arg Ser Pro Leu Ala Phe Ile Pro Phe Ser Ala Gly Pro  
455 460 465

Arg Asn Cys Ile Gly Gln Ala Phe Ala Met Ala Glu Met Lys Val  
470 475 480

Val Leu Ala Leu Met Leu Leu His Phe Arg Phe Leu Pro Asp His  
485 490 495

Thr Glu Pro Arg Arg Lys Leu Glu Leu Ile Met Arg Ala Glu Gly  
500 505 510

Gly Leu Trp Leu Arg Val Glu Pro Leu Asn Val Gly Leu Gln  
515 520

<210> 55

<211> 644

<212> DNA

<213> Homo Sapien

<400> 55

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gaagcgaatg ttgagccta ctcgtttgat tgcaactatc atggtgctgt 100

tgtgttttgc acttacctg tgttctgcct ttggtggca taacaaggga 150

cttgactta tcttctgcat ttgcagtct ttggcattga cgtggtacag 200

ccttccttc ataccatttg caagggatgc tgtgaagaag tgttttgccg 250

tgtgtcttgc ataattcatg gccagtttta tgaagctttg gaaggcacta 300

tggacagaag ctggtggaca gttttgtaac tatcttcgaa acctctgtct 350

tacagacatg tgccttttat ctgcagcaa tgtgttgctt gtgattcgaa 400

cattgaggg ttacttttgg aagcaacaat acattctcga acctgaatgt 450

cagtagcaca ggatgagaag tgggttctgt atcttggtga gtggaatctt 500

cctcatgtac ctgttcctc tctggatgtt gtccactga attcccatga 550

atacaaacct attcagcaac agcaaaaaaa aaaaaaaaaa aaaaaaaaaa 600

aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaa 644

# Sequence Listing - P3230R1C1.txt

<210> 56  
 <211> 77  
 <212> PRT  
 <213> Homo Sapien  
 <400> 56  
 Met Gly Pro Val Lys Gln Leu Lys Arg Met Phe Glu Pro Thr Arg  
 1 5 10 15

Leu Ile Ala Thr Ile Met Val Leu Leu Cys Phe Ala Leu Thr Leu  
 20 25 30

Cys Ser Ala Phe Trp Trp His Asn Lys Gly Leu Ala Leu Ile Phe  
 35 40 45

Cys Ile Leu Gln Ser Leu Ala Leu Thr Trp Tyr Ser Leu Ser Phe  
 50 55 60

Ile Pro Phe Ala Arg Asp Ala Val Lys Lys Cys Phe Ala Val Cys  
 65 70 75

Leu Ala

<210> 57  
 <211> 3334  
 <212> DNA  
 <213> Homo Sapien

<400> 57  
 cggtctgagc tcgagccgaa tcggctcgag gggcagtggg gcaccagca 50  
 ggccgccaac atgctctgtc tgtgcctgta cgtgccggtc atcggggaag 100  
 ccagaccga gttccagtac ttgagtcga aggggctccc tgccgagctg 150  
 aagtccattt tcaagctcag tgtcttcac ccctccagg aattctccac 200  
 ctaccgccag tggaagcaga aaattgtaca agctggagat aaggaccttg 250  
 atgggcagct agactttgaa gaattgtcc attatctcca agatcatgag 300  
 aagaagctga ggctggtgtt taagattttg gacaaaaaga atgatggacg 350  
 cattgacgcg caggagatca tgcagtcct gcgggacttg ggagtcaaga 400  
 tatctgaaca gcaggcagaa aaaattctca agagcatgga taaaacggc 450  
 acgatgacca tcgactggaa cgagtggaga gactaccacc tcctccacc 500  
 cgtggaaaac atccccgaga tcattctcta ctggaagcat tccacgatct 550  
 ttgatgtggg tgagaatcta acgggtccgg atgagttcac agtggaggag 600  
 aggcagacgg ggatgtggtg gagacacctg gtggcaggag gtggggcagg 650

Sequence Listing - P3230R1C1.txt

ggccgatatcc agaacctgca cgccccccct ggacaggctc aagggtgctca 700  
tgcagggtcca tgcctcccg agcaacaaca tgggcatcgt tgggtggcttc 750  
actcagatga ttcgagaagg agggggccagg tcactctggc ggggcaatgg 800  
catcaacgtc ctcaaaattg cccccgaatc agccatcaaa tcatggcct 850  
atgagcagat caagcgctt gttggtagt accaggagac tctgaggatt 900  
cacgagaggc ttgtggcagg gtccttggca ggggccatcg ccagagcag 950  
catctacca atggagggtcc tgaagaccg gatggcgctg cggaagacag 1000  
gccagtactc aggaatgctg gactgcgcca ggaggatcct ggccagagag 1050  
ggggtggccg ccttctaaa aggctatgtc cccaacatgc tgggcatcat 1100  
cccctatgcc ggcatcgacc ttgcagtcta cgagacgctc aagaatgcct 1150  
ggctgcagca ctatgcagtg aacagcgcg accccggcgt gtttgtgctc 1200  
ctggcctgtg gcaccatgtc cagtacctgt ggccagctgg ccagctacc 1250  
cctggcccta gtcaggaccc ggatgcaggc gcaagcctct attgagggcg 1300  
ctccggagggt gaccatgagc agcctcttca aacatatcct gcggaccgag 1350  
ggggccttcg ggctgtacag ggggctggcc cccaacttca tgaaggatc 1400  
cccagctgtg agcatcagct acgtggtcta cgagaacctg aagatcacc 1450  
tgggcgtgca gtcgcggtga cggggggagg gccgcccggc agtggaactc 1500  
ctgatcctgg gccgcagcct ggggtgtgca gccatctcat tctgtgaatg 1550  
tgccaacact aagctgtctc gagccaagct gtgaaaacc tagacgcacc 1600  
cgcagggagg gtggggagag ctggcaggcc cagggttgt cctgctgacc 1650  
ccagcagacc ctctgttg ttccagcgaa gaccacaggc attccttagg 1700  
gtccagggtc agcaggctcc gggctcacat gtgtaaggac aggacattt 1750  
ctgcagtgcc tgccaatagt gagcttgag cctggaggcc ggcttagttc 1800  
ttccatttca cccttcagc cagctgttg ccacggcccc tgcctctgg 1850  
tctgccgtgc atctcctgt gccctcttc tgctgcctg tctgtgagg 1900  
taagggtggga ggagggtac agccacatc ccacccctc gtccaatccc 1950  
ataatccatg atgaaagggt aggtcacgtg gcctcccagg cctgacttc 2000  
caacctacag cattgacgcc aactggctg tgaaggaaga ggaaaggatc 2050

Sequence Listing - P3230R1C1.txt

tggccttggtg gtcactggca tctgagccct gctgatggct ggggctctcg 2100  
ggcatgcttg ggagtgcagg gggctcgggc tgcctggcct ggctgcacag 2150  
aaggcaagtg ctgggggtca tgggtgcttg agctggcctg gaccctgtca 2200  
ggatggggccc cacctcagaa ccaaactcac tgtccccact gtggcatgag 2250  
ggcagtggag caccatgttt gagggcgaag ggcagagcgt ttgtgtgttc 2300  
tggggaggga aggaaaaggt gttggaggcc ttaattatgg actgttgga 2350  
aaagggtttt gtccagaagg acaagccgga caaatgagcg acttctgtgc 2400  
ttccagagga agacgaggga gcaggagctt ggctgactgc tcagagtctg 2450  
ttctgacgcc ctgggggttc ctgtccaacc ccagcagggg cgcagcggga 2500  
ccagccccac attccacttg tgtcactgct tggaacctat ttattttgta 2550  
ttattttgaa cagagttagt tcctaactat tttatagat ttgtttaatt 2600  
aatagcttgt cattttcaag ttcatttttt attcatattt atgttcatgg 2650  
ttgattgtac ctccaagc ccgccagtg ggatgggagg aggaggagaa 2700  
ggggggcctt gggccgctgc agtcacatct gtccagagaa attccttttg 2750  
ggactggagg cagaaaagcg gccagaaggc agcagccctg gctcctttcc 2800  
tttggcaggt tggggaaggg cttgccccca gccttaggat ttcagggttt 2850  
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ggctggagga gagggtaggg ggctggctcc gtcctccca gccttctgct 3050  
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attccaccag aatgacctga tgaggaaatc ttcaatagga tgcaaagatc 3150  
aatgcaaaaa ttgttatata tgaacatata actggagtcg tcaaaaagca 3200  
aattaagaaa gaattggacg ttagaagttg tcatttaaag cagccttcta 3250  
ataaagttgt ttcaaagctg aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 3300  
aaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaa 3334

<210> 58

<211> 469



Sequence Listing - P3230R1C1.txt

<212> PRT

<213> Homo Sapien

<400> 58

Met Leu Cys Leu Cys Leu Tyr Val Pro Val Ile Gly Glu Ala Gln

1 5 10 15

Thr Glu Phe Gln Tyr Phe Glu Ser Lys Gly Leu Pro Ala Glu Leu

20 25 30

Lys Ser Ile Phe Lys Leu Ser Val Phe Ile Pro Ser Gln Glu Phe

35 40 45

Ser Thr Tyr Arg Gln Trp Lys Gln Lys Ile Val Gln Ala Gly Asp

50 55 60

Lys Asp Leu Asp Gly Gln Leu Asp Phe Glu Glu Phe Val His Tyr

65 70 75

Leu Gln Asp His Glu Lys Lys Leu Arg Leu Val Phe Lys Ile Leu

80 85 90

Asp Lys Lys Asn Asp Gly Arg Ile Asp Ala Gln Glu Ile Met Gln

95 100 105

Ser Leu Arg Asp Leu Gly Val Lys Ile Ser Glu Gln Gln Ala Glu

110 115 120

Lys Ile Leu Lys Ser Met Asp Lys Asn Gly Thr Met Thr Ile Asp

125 130 135

Trp Asn Glu Trp Arg Asp Tyr His Leu Leu His Pro Val Glu Asn

140 145 150

Ile Pro Glu Ile Ile Leu Tyr Trp Lys His Ser Thr Ile Phe Asp

155 160 165

Val Gly Glu Asn Leu Thr Val Pro Asp Glu Phe Thr Val Glu Glu

170 175 180

Arg Gln Thr Gly Met Trp Trp Arg His Leu Val Ala Gly Gly Gly

185 190 195

Ala Gly Ala Val Ser Arg Thr Cys Thr Ala Pro Leu Asp Arg Leu

200 205 210

Lys Val Leu Met Gln Val His Ala Ser Arg Ser Asn Asn Met Gly

215 220 225

Ile Val Gly Gly Phe Thr Gln Met Ile Arg Glu Gly Gly Ala Arg

230 235 240

Ser Leu Trp Arg Gly Asn Gly Ile Asn Val Leu Lys Ile Ala Pro

245 250 255

Sequence Listing - P3230R1C1.txt

Glu Ser Ala Ile Lys Phe Met Ala Tyr Glu Gln Ile Lys Arg Leu  
260 265 270

Val Gly Ser Asp Gln Glu Thr Leu Arg Ile His Glu Arg Leu Val  
275 280 285

Ala Gly Ser Leu Ala Gly Ala Ile Ala Gln Ser Ser Ile Tyr Pro  
290 295 300

Met Glu Val Leu Lys Thr Arg Met Ala Leu Arg Lys Thr Gly Gln  
305 310 315

Tyr Ser Gly Met Leu Asp Cys Ala Arg Arg Ile Leu Ala Arg Glu  
320 325 330

Gly Val Ala Ala Phe Tyr Lys Gly Tyr Val Pro Asn Met Leu Gly  
335 340 345

Ile Ile Pro Tyr Ala Gly Ile Asp Leu Ala Val Tyr Glu Thr Leu  
350 355 360

Lys Asn Ala Trp Leu Gln His Tyr Ala Val Asn Ser Ala Asp Pro  
365 370 375

Gly Val Phe Val Leu Leu Ala Cys Gly Thr Met Ser Ser Thr Cys  
380 385 390

Gly Gln Leu Ala Ser Tyr Pro Leu Ala Leu Val Arg Thr Arg Met  
395 400 405

Gln Ala Gln Ala Ser Ile Glu Gly Ala Pro Glu Val Thr Met Ser  
410 415 420

Ser Leu Phe Lys His Ile Leu Arg Thr Glu Gly Ala Phe Gly Leu  
425 430 435

Tyr Arg Gly Leu Ala Pro Asn Phe Met Lys Val Ile Pro Ala Val  
440 445 450

Ser Ile Ser Tyr Val Val Tyr Glu Asn Leu Lys Ile Thr Leu Gly  
455 460 465

Val Gln Ser Arg

<210> 59

<211> 1658

<212> DNA

<213> Homo Sapien

<400> 59

ggaaggcagc ggcagctcca ctcagccagt acccagatac gctgggaacc 50

ttccccagcc atggcttccc tggggcagat cctcttctgg agcataatta 100

Sequence Listing - P3230R1C1.txt

gcatcatcat tattctggct ggagcaattg cactcatcat tggctttggt 150  
atttcaggga gacactccat cacagtcact actgtcgct cagctgggaa 200  
cattggggag gatggaatcc tgagctgcac tttgaacct gacatcaaac 250  
tttctgatat cgtgatacaa tggctgaagg aagggtgttt aggcttggtc 300  
catgagtta aagaaggcaa agatgagctg tcggagcagg atgaaatgtt 350  
cagaggccgg acagcagtgt ttgctgatca agtgatagtt ggcaatgcct 400  
ctttgcggct gaaaaacgtg caactcacag atgctggcac ctacaaatgt 450  
tatatcatca ctctaaagg caaggggaat gctaaccttg agtataaaac 500  
tggagccttc agcatgccgg aagtgaatgt ggactataat gccagctcag 550  
agaccttgcg gtgtgaggct ccccgatggt tccccagcc cacagtggtc 600  
tgggcatccc aagttgacca gggagccaac ttctcggaag tctcaatac 650  
cagctttgag ctgaactctg agaatgtgac catgaagggt gtgtctgtgc 700  
tctacaatgt tacgatcaac aacacatact cctgtatgat tgaaaatgac 750  
attgccaaag caacagggga tatcaaagt acagaatcgg agatcaaaag 800  
gaggagtcac ctacagctgc taaactcaa ggcttctctg tgtgtctctt 850  
ctttcttgc catcagctgg gcacttctgc ctctcagccc ttacctgatg 900  
ctaaaataat gtgccttggc caaaaaaag catgcaaagt cattgttaca 950  
acagggatct acagaactat ttcaccacca gatatgacct agttttatat 1000  
ttctgggagg aaatgaattc atatctagaa gtctggagtg agcaaacaag 1050  
agcaagaaac aaaaagaagc caaaagcaga aggtccaat atgaacaaga 1100  
taaactatc ttcaaagaca tattagaagt tgggaaaata attcatgtga 1150  
actagacaag tgtgttaaga gtgataagta aaatgcacgt ggagacaagt 1200  
gcatccccag atctcaggga cctccccctg cctgtcacct ggggagtgag 1250  
aggacaggat agtgcattgt cttgtctct gaatttttag ttatatgtgc 1300  
tgtaatgttg ctctgaggaa gccctggaa agtctatccc aacatatcca 1350  
catcttatat tccacaaatt aagctgtagt atgtacccta agacgctgct 1400  
aattgactgc cacttcgcaa ctcaggggag gctgcatttt agtaatgggt 1450  
caaatgattc acttttatg atgcttcaa aggtgccttg gcttctcttc 1500

Sequence Listing - P3230R1C1.txt

ccaactgaca aatgccaaag ttgagaaaaa tgatcataat ttagcataa 1550  
 acagagcagt cggggacacc gattttataa ataaactgag caccttcttt 1600  
 ttaaacaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 1650  
 aaaaaaaaa 1658

<210> 60  
 <211> 282  
 <212> PRT  
 <213> Homo Sapien

<400> 60  
 Met Ala Ser Leu Gly Gln Ile Leu Phe Trp Ser Ile Ile Ser Ile  
 1 5 10 15  
 Ile Ile Ile Leu Ala Gly Ala Ile Ala Leu Ile Ile Gly Phe Gly  
 20 25 30  
 Ile Ser Gly Arg His Ser Ile Thr Val Thr Thr Val Ala Ser Ala  
 35 40 45  
 Gly Asn Ile Gly Glu Asp Gly Ile Leu Ser Cys Thr Phe Glu Pro  
 50 55 60  
 Asp Ile Lys Leu Ser Asp Ile Val Ile Gln Trp Leu Lys Glu Gly  
 65 70 75  
 Val Leu Gly Leu Val His Glu Phe Lys Glu Gly Lys Asp Glu Leu  
 80 85 90  
 Ser Glu Gln Asp Glu Met Phe Arg Gly Arg Thr Ala Val Phe Ala  
 95 100 105  
 Asp Gln Val Ile Val Gly Asn Ala Ser Leu Arg Leu Lys Asn Val  
 110 115 120  
 Gln Leu Thr Asp Ala Gly Thr Tyr Lys Cys Tyr Ile Ile Thr Ser  
 125 130 135  
 Lys Gly Lys Gly Asn Ala Asn Leu Glu Tyr Lys Thr Gly Ala Phe  
 140 145 150  
 Ser Met Pro Glu Val Asn Val Asp Tyr Asn Ala Ser Ser Glu Thr  
 155 160 165  
 Leu Arg Cys Glu Ala Pro Arg Trp Phe Pro Gln Pro Thr Val Val  
 170 175 180  
 Trp Ala Ser Gln Val Asp Gln Gly Ala Asn Phe Ser Glu Val Ser  
 185 190 195  
 Asn Thr Ser Phe Glu Leu Asn Ser Glu Asn Val Thr Met Lys Val  
 200 205 210

Sequence Listing - P3230R1C1.txt

Val Ser Val Leu Tyr Asn Val Thr Ile Asn Asn Thr Tyr Ser Cys  
215 220 225

Met Ile Glu Asn Asp Ile Ala Lys Ala Thr Gly Asp Ile Lys Val  
230 235 240

Thr Glu Ser Glu Ile Lys Arg Arg Ser His Leu Gln Leu Leu Asn  
245 250 255

Ser Lys Ala Ser Leu Cys Val Ser Ser Phe Phe Ala Ile Ser Trp  
260 265 270

Ala Leu Leu Pro Leu Ser Pro Tyr Leu Met Leu Lys  
275 280

<210> 61

<211> 1617

<212> DNA

<213> Homo Sapien

<400> 61

tgacgtcaga atcaccatgg ccagctatcc ttaccggcag ggctgcccag 50  
gagctgcagg acaagcacca ggagcccctc cgggtagcta ctaccctgga 100  
cccccaata gtggagggca gtatggtagt gggctacccc ctggtggtgg 150  
ttatgggggt cctgcccctg gagggcctta tggaccacca gctggtggag 200  
ggccctatgg acacccaat cctgggatgt tcccctctgg aactccagga 250  
ggaccatatg gcggtgcagc tcccgggggc ccctatggtc agccacctcc 300  
aagttcctac ggtgccagc agcctgggct ttatggacag ggtggcgccc 350  
ctcccaatgt ggatcctgag gcctactcct ggttcagtc ggtggactca 400  
gatcacagtg gctatatctc catgaaggag ctaaagcagg ccctgggtcaa 450  
ctgcaattgg tcttcattca atgatgagac ctgcctcatg atgataaaca 500  
tgtttgacaa gaccaagtca ggccgcatcg atgtctacgg ctctcagcc 550  
ctgtggaaat tcatccagca gtggaagaac ctctccagc agtatgaccg 600  
ggaccgctcg ggctccatta gctacacaga gctgcagcaa gctctgtccc 650  
aatgggcta caactgagc cccagttca cccagcttct ggtctccgc 700  
tactgccac gctctgcaa tcttgccatg cagcttgacc gttcatcca 750  
ggtgtgcacc cagctgcagg tgctgacaga ggccttcgg gagaaggaca 800  
cagctgtaca aggcaacatc cggctcagct tcgaggactt cgtcaccatg 850

Sequence Listing - P3230R1C1.txt

acagcttctc ggatgctatg acccaacat ctgtggagag tggagtgcac 900  
cagggacctt tcctggcttc ttagagttag agaagtatgt ggacatctct 950  
tcttttctcg tccctctaga agaacattct cccttgcttg atgcaacact 1000  
gttccaaaag aggggtggaga gtcctgcata atagccacca aatagttagg 1050  
accggggctg aggccacaca gatagggggc tgatggagga gaggatagaa 1100  
gttgaatgtc ctgatggcca tgagcagttg agtggcacag cctggcacca 1150  
ggagcaggtc cttgtaatgg agttagtgtc cagtcagctg agctccaccc 1200  
tgatgccagt ggtgagtgtt catcggcctg ttaccgtag tacctgtgtt 1250  
ccctcaccag gccatcctgt caaacgagcc cttttctcc aaagtggaat 1300  
ctgaccaagc atgagagaga tctgtctatg ggaccagtgg cttggattct 1350  
gccacacca taaatccttg tgtgttaact tctagctgcc tggggctggc 1400  
cctgctcaga caaatctgct ccctgggcat cttggccag gcttctgcc 1450  
cctgcagctg ggaccctca cttgcctgcc atgctctgct cggcttcagt 1500  
ctccaggaga cagtgggtcac ctctccctgc caatactttt ttaatttgc 1550  
atTTTTTtc atttggggcc aaaagtccag tgaaattgta agcttcaata 1600  
aaaggatgaa actctga 1617

<210> 62  
<211> 284  
<212> PRT  
<213> Homo Sapien

<400> 62  
Met Ala Ser Tyr Pro Tyr Arg Gln Gly Cys Pro Gly Ala Ala Gly  
1 5 10 15  
Gln Ala Pro Gly Ala Pro Pro Gly Ser Tyr Tyr Pro Gly Pro Pro  
20 25 30  
Asn Ser Gly Gly Gln Tyr Gly Ser Gly Leu Pro Pro Gly Gly Gly  
35 40 45  
Tyr Gly Gly Pro Ala Pro Gly Gly Pro Tyr Gly Pro Pro Ala Gly  
50 55 60  
Gly Gly Pro Tyr Gly His Pro Asn Pro Gly Met Phe Pro Ser Gly  
65 70 75  
Thr Pro Gly Gly Pro Tyr Gly Gly Ala Ala Pro Gly Gly Pro Tyr

Sequence Listing - P3230R1C1.txt

80	85	90
Gly Gln Pro Pro Pro Ser Ser Tyr Gly Ala Gln Gln Pro Gly Leu		
95	100	105
Tyr Gly Gln Gly Gly Ala Pro Pro Asn Val Asp Pro Glu Ala Tyr		
110	115	120
Ser Trp Phe Gln Ser Val Asp Ser Asp His Ser Gly Tyr Ile Ser		
125	130	135
Met Lys Glu Leu Lys Gln Ala Leu Val Asn Cys Asn Trp Ser Ser		
140	145	150
Phe Asn Asp Glu Thr Cys Leu Met Met Ile Asn Met Phe Asp Lys		
155	160	165
Thr Lys Ser Gly Arg Ile Asp Val Tyr Gly Phe Ser Ala Leu Trp		
170	175	180
Lys Phe Ile Gln Gln Trp Lys Asn Leu Phe Gln Gln Tyr Asp Arg		
185	190	195
Asp Arg Ser Gly Ser Ile Ser Tyr Thr Glu Leu Gln Gln Ala Leu		
200	205	210
Ser Gln Met Gly Tyr Asn Leu Ser Pro Gln Phe Thr Gln Leu Leu		
215	220	225
Val Ser Arg Tyr Cys Pro Arg Ser Ala Asn Pro Ala Met Gln Leu		
230	235	240
Asp Arg Phe Ile Gln Val Cys Thr Gln Leu Gln Val Leu Thr Glu		
245	250	255
Ala Phe Arg Glu Lys Asp Thr Ala Val Gln Gly Asn Ile Arg Leu		
260	265	270
Ser Phe Glu Asp Phe Val Thr Met Thr Ala Ser Arg Met Leu		
275	280	

<210> 63

<211> 1234

<212> DNA

<213> Homo Sapien

<400> 63

caggatgcag ggccgcgtgg caggagactg cgctcctctg ggctgtctcc 50

tggtctgtct tcatctccca ggctctttg cccggagcat cgggtgtgtg 100  
gaggagaaag ttcccaaaa ctccgggacc aactgcctc agctcggaca 150

accttctcc actggcccct ctaactctga acatccgcag cccgctctgg 200

accctaggtc taatgacttg gcaagggttc ctctgaagct cagcgtgcct 250

Sequence Listing - P3230R1C1.txt

ccatcagatg gcttcccacc tgcaggaggt tctgcagtgc agaggtggcc 300  
tccatcgtgg gggctgcctg ccatggattc ctggccccct gaggatcctt 350  
ggcagatgat ggctgctgcg gctgaggacc gcctggggga agcgctgcct 400  
gaagaactct cttacctctc cagtgctgcg gccctcgctc cgggcagtgg 450  
cccttgcct ggggagtctt ctccgatgc cacaggcctc tcacctgagg 500  
cttactcct ccaccaggac tcggagtcca gacgactgcc ccgttcta 550  
tcactgggag cggggggaaa aatcctttcc caacgccctc cctggctct 600  
catccacagg gttctgcctg atcacccctg gggtagcctg aatcccagt 650  
tgtctggggg aggtggaggc cctgggactg gttggggaac gagggccatg 700  
ccacaccctg agggaatctg gggtagcaat aatcaacccc caggtaccag 750  
ctggggaaat attaactggt atccaggagg cagctgggga aatattaatc 800  
ggtagccagg aggcagctgg gggaatatta atcggtatcc aggaggcagc 850  
tgggggaata tcatctata ccaggtatc aataacccat ttctcctgg 900  
agttctcgc cctcctggct cttctggaa catcccagct ggcttccta 950  
atctccaag ccctaggttg cagtggggct agagcacgat agagggaaac 1000  
ccaacattgg gagtagagt cctgctcccg ccccttgctg tgtgggctca 1050  
atccaggccc tgtaacatg tttccagcac tatccccact ttcagtgcc 1100  
tcccctgctc atctcaata aaataaaagc acttatgaaa aaaaaaaaaa 1150  
aaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 1200  
aaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaa 1234

<210> 64  
<211> 325  
<212> PRT  
<213> Homo Sapien

<400> 64  
Met Gln Gly Arg Val Ala Gly Ser Cys Ala Pro Leu Gly Leu Leu  
1 5 10 15  
Leu Val Cys Leu His Leu Pro Gly Leu Phe Ala Arg Ser Ile Gly  
20 25 30  
Val Val Glu Glu Lys Val Ser Gln Asn Phe Gly Thr Asn Leu Pro  
35 40 45



Sequence Listing - P3230R1C1.txt

Gln Leu Gly Gln Pro Ser Ser Thr Gly Pro Ser Asn Ser Glu His  
50 55 60

Pro Gln Pro Ala Leu Asp Pro Arg Ser Asn Asp Leu Ala Arg Val  
65 70 75

Pro Leu Lys Leu Ser Val Pro Pro Ser Asp Gly Phe Pro Pro Ala  
80 85 90

Gly Gly Ser Ala Val Gln Arg Trp Pro Pro Ser Trp Gly Leu Pro  
95 100 105

Ala Met Asp Ser Trp Pro Pro Glu Asp Pro Trp Gln Met Met Ala  
110 115 120

Ala Ala Ala Glu Asp Arg Leu Gly Glu Ala Leu Pro Glu Glu Leu  
125 130 135

Ser Tyr Leu Ser Ser Ala Ala Ala Leu Ala Pro Gly Ser Gly Pro  
140 145 150

Leu Pro Gly Glu Ser Ser Pro Asp Ala Thr Gly Leu Ser Pro Glu  
155 160 165

Ala Ser Leu Leu His Gln Asp Ser Glu Ser Arg Arg Leu Pro Arg  
170 175 180

Ser Asn Ser Leu Gly Ala Gly Gly Lys Ile Leu Ser Gln Arg Pro  
185 190 195

Pro Trp Ser Leu Ile His Arg Val Leu Pro Asp His Pro Trp Gly  
200 205 210

Thr Leu Asn Pro Ser Val Ser Trp Gly Gly Gly Gly Pro Gly Thr  
215 220 225

Gly Trp Gly Thr Arg Pro Met Pro His Pro Glu Gly Ile Trp Gly  
230 235 240

Ile Asn Asn Gln Pro Pro Gly Thr Ser Trp Gly Asn Ile Asn Arg  
245 250 255

Tyr Pro Gly Gly Ser Trp Gly Asn Ile Asn Arg Tyr Pro Gly Gly  
260 265 270

Ser Trp Gly Asn Ile Asn Arg Tyr Pro Gly Gly Ser Trp Gly Asn  
275 280 285

Ile His Leu Tyr Pro Gly Ile Asn Asn Pro Phe Pro Pro Gly Val  
290 295 300

Leu Arg Pro Pro Gly Ser Ser Trp Asn Ile Pro Ala Gly Phe Pro  
305 310 315

Asn Pro Pro Ser Pro Arg Leu Gln Trp Gly

Sequence Listing - P3230R1C1.txt

320

325

<210> 65  
<211> 422  
<212> DNA  
<213> Homo Sapien

<400> 65  
aaggagaggc caccgggact tcagtgtctc ctccatccca ggagcgcagt 50  
ggccactatg gggctctgggc tgccccttgt cctcctcttg accctccttg 100  
gcagctcaca tggaacaggg ccgggtatga ctttgcaact gaagctgaag 150  
gagtcttttc tgacaaattc ctctatgag tccagcttcc tggaattgct 200  
tgaaaagctc tgctctctcc tccatctccc ttcagggacc agcgtcaccc 250  
tccaccatgc aagatctcaa caccatgttg tctgcaacac atgacagcca 300  
ttgaagcctg tgtccttctt ggcccgggct tttgggccgg ggatgcagga 350  
ggcaggcccc gaccctgtct ttcagcaggc ccccacctc ctgagtggca 400  
ataaataaaa ttcggtatgc tg 422

<210> 66  
<211> 78  
<212> PRT  
<213> Homo Sapien

<400> 66  
Met Gly Ser Gly Leu Pro Leu Val Leu Leu Leu Thr Leu Leu Gly  
1 5 10 15  
Ser Ser His Gly Thr Gly Pro Gly Met Thr Leu Gln Leu Lys Leu  
20 25 30  
Lys Glu Ser Phe Leu Thr Asn Ser Ser Tyr Glu Ser Ser Phe Leu  
35 40 45  
Glu Leu Leu Glu Lys Leu Cys Leu Leu Leu His Leu Pro Ser Gly  
50 55 60  
Thr Ser Val Thr Leu His His Ala Arg Ser Gln His His Val Val  
65 70 75  
Cys Asn Thr

<210> 67  
<211> 744  
<212> DNA  
<213> Homo Sapien

# Sequence Listing - P3230R1C1.txt

<400> 67

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 caaagacgcc cgggccaggt gccccgtcgc aggtgccctt ggccggagat 100  
 gcggtaggag gggcgagcgc gagaagcccc ttctcggcg ctgccaacct 150  
 gccaccagc ccatggcgaa ccccgggctg gggctgcttc tggcgctggg 200  
 cctgccgttc ctgctggccc gctggggccg agcctggggg caatacaga 250  
 ccacttctgc aaatgagaat agcactgttt tgccttcac caccagctcc 300  
 agctccgatg gcaacctgcg tccggaagcc atcactgcta tcactgtgt 350  
 cttctccctc ttggctgcct tgctctggc tgtggggctg gcactgttg 400  
 tgcggaagct tcgggagaag cggcagacgg agggcaccta cgggccagt 450  
 agcgaggagc agttctccca tgcagccgag gcccgggccc ctaggactc 500  
 caaggagacg gtgcagggtt gcctgcccat ctaggctccc tctctgcat 550  
 ctgtctcctt tcattgctgt gtgaccttgg ggaaaggcag tgcctctct 600  
 gggcagtcag atccaccag tgcttaatag cagggaagaa ggtacttcaa 650  
 agactctgcc cctgaggtca agagaggatg gggctattca ctttatata 700  
 tttatataaa attagtagtg agatgtaaaa aaaaaaaaaa aaaa 744

<210> 68

<211> 123

<212> PRT

<213> Homo Sapien

<400> 68

Met Ala Asn Pro Gly Leu Gly Leu Leu Ala Leu Gly Leu Pro  
 1 5 10 15  
 Phe Leu Leu Ala Arg Trp Gly Arg Ala Trp Gly Gln Ile Gln Thr  
 20 25 30  
 Thr Ser Ala Asn Glu Asn Ser Thr Val Leu Pro Ser Ser Thr Ser  
 35 40 45  
 Ser Ser Ser Asp Gly Asn Leu Arg Pro Glu Ala Ile Thr Ala Ile  
 50 55 60  
 Ile Val Val Phe Ser Leu Leu Ala Ala Leu Leu Leu Ala Val Gly  
 65 70 75  
 Leu Ala Leu Leu Val Arg Lys Leu Arg Glu Lys Arg Gln Thr Glu  
 80 85 90  
 Gly Thr Tyr Arg Pro Ser Ser Glu Glu Gln Phe Ser His Ala Ala

Sequence Listing - P3230R1C1.txt

95 100 105

Glu Ala Arg Ala Pro Gln Asp Ser Lys Glu Thr Val Gln Gly Cys  
110 115 120

Leu Pro Ile

<210> 69  
<211> 3265  
<212> DNA  
<213> Homo Sapien

<400> 69  
gccaggaata actagagagg aacaatgggg ttattcagag gttttgttt 50  
cctcttagtt ctgtgcctgc tgcaccagtc aaatacttcc ttcattaagc 100  
tgaataataa tggctttgaa gatattgtca ttgttataga tcctagtgtg 150  
ccagaagatg aaaaaataat tgaacaaata gaggatatgg tgactacagc 200  
ttctacgtac ctgtttgaag ccacagaaaa aagatttttt ttcaaaaatg 250  
tatctatatt aattcctgag aattggaagg aaaatcctca gtacaaaagg 300  
ccaaaacatg aaaaccataa acatgctgat gttatagttg caccacctac 350  
actcccaggt agagatgaac catacaccaa gcagttcaca gaatgtggag 400  
agaaaggcga atacattcac ttcaccctg accttctact tggaaaaaaa 450  
caaatgaat atggaccacc aggcaaactg ttgtccatg agtgggctca 500  
cctccggtgg ggagtgttg atgagtacaa tgaagatcag ccttctacc 550  
gtgctaagtc aaaaaaatc gaagcaacaa ggtgttccgc aggtatctct 600  
ggtagaata gagtttataa gtgtcaagga ggcagctgtc ttagtagagc 650  
atgcagaatt gattctacaa caaaactgta tggaaaagat tgtcaattct 700  
ttctgataa agtacaaca gaaaaagcat ccataatgtt tatgcaaagt 750  
attgattctg ttgttgaatt ttgtaacgaa aaaaccata atcaagaagc 800  
tccaagccta caaacataa agtgaatgt tagaagtaca tgggaggtga 850  
ttagcaattc ttaggatttt aaaaacacca taccatggt gacaccacct 900  
cctccacctg tcttctcatt gctgaagatc agtcaaagaa ttgtgtgctt 950  
agttcttgat aagtctggaa gcatgggggg taaggaccgc ctaaatcgaa 1000  
tgaatcaagc agcaaaacat ttctgtctgc agactgttga aaatggatcc 1050

Sequence Listing - P3230R1C1.txt

tggttggttgga tgggtcactt tgatagtact gccactattg taaataagct 1100  
aatccaaata aaaagcagtg atgaaagaaa cacactcatg gcaggattac 1150  
ctacatatcc tctgggagga acttccatct gctctggaat taaatatgca 1200  
tttcagggtga ttggagagct acattcccaa ctcgatggat ccgaagtact 1250  
gctgctgact gatgggggagg ataactctgc aagttcttgt attgatgaag 1300  
tgaaacaaag tggggccatt gttcatttta ttgctttggg aagagctgct 1350  
gatgaagcag taatagagat gagcaagata acaggaggaa gtcattttta 1400  
tgtttcagat gaagctcaga acaatggcct cattgatgct tttggggctc 1450  
ttacatcagg aaatactgat ctctcccaga agtcccttca gctcgaaagt 1500  
aagggattaa cactgaatag taatgcctgg atgaacgaca ctgtcataat 1550  
tgatagtaca gtgggaaagg acacgttctt tctcatcaca tggaacagtc 1600  
tgctcccag tatttctctc tgggatccca gtggaacaat aatggaaaat 1650  
ttcacagtgg atgcaacttc caaatggcc tatctcagta ttccaggaaac 1700  
tgcaaagggtg ggcacttggg catacaatct tcaagccaaa gcgaaccag 1750  
aaacattaac tattacagta acttctcgag cagcaaattc ttctgtgcct 1800  
ccaatcacag tgaatgctaa aatgaataag gacgtaaaca gtttcccag 1850  
cccaatgatt gtttacgcag aaattctaca aggatatgta cctgttcttg 1900  
gagccaatgt gactgcttc attgaatcac agaattggaca tacagaagtt 1950  
ttggaacttt tggataatgg tgcaggcgct gattcttca agaattgatg 2000  
agtctactcc aggtatttta cagcatatac agaaaatggc agatatagct 2050  
taaaagtctg ggctcatgga ggagcaaaca ctgccaggct aaaattacgg 2100  
cctccactga atagagccgc gtacatacca ggctgggtag tgaacgggga 2150  
aattgaagca aacccgcaa gacctgaaat tgatgaggat actcagacca 2200  
ccttgaggga ttcagccga acagcatccg gaggtgcatt tgtggtatca 2250  
caagtccaa gccttcctt gcctgaccaa taccaccaa gtcaaatcac 2300  
agacctgat gccacagttc atgaggataa gattattctt acatggacag 2350  
caccaggaga taattttgat gttggaaaag ttcaacgta tatcataaga 2400  
ataagtgcaa gtattcttga tctaagagac agttttgatg atgctcttca 2450

Sequence Listing - P3230R1C1.txt

agtaaatact actgatctgt caccaaagga ggccaactcc aaggaaagct 2500  
 ttgcatttaa accagaaaat atctcagaag aaaatgcaac ccacatattt 2550  
 attgccatta aaagtataga taaaagcaat ttgacatcaa aagtatccaa 2600  
 cattgcacaa gtaactttgt ttatccctca agcaaatcct gatgacattg 2650  
 atcctacacc tactcctact cctactccta ctctgataa aagtcataat 2700  
 tctggagtta atatttctac gctggattg tctgtgattg ggtctgttgt 2750  
 aattgtaac tttattttaa gtaccacat ttgaacctta acgaagaaaa 2800  
 aaatcttcaa gtagacctag aagagagttt taaaaacaa aacaatgtaa 2850  
 gtaaaggata tttctgaatc taaaattca tcccatgtgt gatcataaac 2900  
 tcataaaaat aattttaaga tgtcggaaaa ggatactttg attaaataaa 2950  
 aacactcatg gatatgtaaa aactgtcaag attaaaattt aatagtttca 3000  
 tttatttgtt attttattg taagaaatag tgatgaacaa agatcctttt 3050  
 tcatactgat acctggttgt atattatttg atgcaacagt tttctgaaat 3100  
 gatatttcaa attgcatcaa gaaattaaaa tcatctatct gagtagtcaa 3150  
 aatacaagta aaggagagca aataaacaac atttgaaaa aaaaaaaaaa 3200  
 aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 3250  
 aaaaaaaaaa aaaaa 3265

<210> 70

<211> 919

<212> PRT

<213> Homo Sapien

<400> 70

Met Gly Leu Phe Arg Gly Phe Val Phe Leu Leu Val Leu Cys Leu

1 5 10 15

Leu His Gln Ser Asn Thr Ser Phe Ile Lys Leu Asn Asn Asn Gly

20 25 30

Phe Glu Asp Ile Val Ile Val Ile Asp Pro Ser Val Pro Glu Asp

35 40 45

Glu Lys Ile Ile Glu Gln Ile Glu Asp Met Val Thr Thr Ala Ser

50 55 60

Thr Tyr Leu Phe Glu Ala Thr Glu Lys Arg Phe Phe Phe Lys Asn

65 70 75

Sequence Listing - P3230R1C1.txt

Val Ser Ile Leu Ile Pro Glu Asn Trp Lys Glu Asn Pro Gln Tyr  
80 85 90

Lys Arg Pro Lys His Glu Asn His Lys His Ala Asp Val Ile Val  
95 100 105

Ala Pro Pro Thr Leu Pro Gly Arg Asp Glu Pro Tyr Thr Lys Gln  
110 115 120

Phe Thr Glu Cys Gly Glu Lys Gly Glu Tyr Ile His Phe Thr Pro  
125 130 135

Asp Leu Leu Leu Gly Lys Lys Gln Asn Glu Tyr Gly Pro Pro Gly  
140 145 150

Lys Leu Phe Val His Glu Trp Ala His Leu Arg Trp Gly Val Phe  
155 160 165

Asp Glu Tyr Asn Glu Asp Gln Pro Phe Tyr Arg Ala Lys Ser Lys  
170 175 180

Lys Ile Glu Ala Thr Arg Cys Ser Ala Gly Ile Ser Gly Arg Asn  
185 190 195

Arg Val Tyr Lys Cys Gln Gly Gly Ser Cys Leu Ser Arg Ala Cys  
200 205 210

Arg Ile Asp Ser Thr Thr Lys Leu Tyr Gly Lys Asp Cys Gln Phe  
215 220 225

Phe Pro Asp Lys Val Gln Thr Glu Lys Ala Ser Ile Met Phe Met  
230 235 240

Gln Ser Ile Asp Ser Val Val Glu Phe Cys Asn Glu Lys Thr His  
245 250 255

Asn Gln Glu Ala Pro Ser Leu Gln Asn Ile Lys Cys Asn Phe Arg  
260 265 270

Ser Thr Trp Glu Val Ile Ser Asn Ser Glu Asp Phe Lys Asn Thr  
275 280 285

Ile Pro Met Val Thr Pro Pro Pro Pro Pro Val Phe Ser Leu Leu  
290 295 300

Lys Ile Ser Gln Arg Ile Val Cys Leu Val Leu Asp Lys Ser Gly  
305 310 315

Ser Met Gly Gly Lys Asp Arg Leu Asn Arg Met Asn Gln Ala Ala  
320 325 330

Lys His Phe Leu Leu Gln Thr Val Glu Asn Gly Ser Trp Val Gly  
335 340 345

Met Val His Phe Asp Ser Thr Ala Thr Ile Val Asn Lys Leu Ile

Sequence Listing - P3230R1C1.txt

350	355	360
Gln Ile Lys Ser Ser Asp	Glu Arg Asn Thr Leu Met Ala Gly Leu	
365	370	375
Pro Thr Tyr Pro Leu Gly	Gly Thr Ser Ile Cys Ser Gly Ile Lys	
380	385	390
Tyr Ala Phe Gln Val Ile	Gly Glu Leu His Ser Gln Leu Asp Gly	
395	400	405
Ser Glu Val Leu Leu Leu	Thr Asp Gly Glu Asp Asn Thr Ala Ser	
410	415	420
Ser Cys Ile Asp Glu Val	Lys Gln Ser Gly Ala Ile Val His Phe	
425	430	435
Ile Ala Leu Gly Arg Ala	Ala Asp Glu Ala Val Ile Glu Met Ser	
440	445	450
Lys Ile Thr Gly Gly Ser	His Phe Tyr Val Ser Asp Glu Ala Gln	
455	460	465
Asn Asn Gly Leu Ile Asp	Ala Phe Gly Ala Leu Thr Ser Gly Asn	
470	475	480
Thr Asp Leu Ser Gln Lys	Ser Leu Gln Leu Glu Ser Lys Gly Leu	
485	490	495
Thr Leu Asn Ser Asn Ala	Trp Met Asn Asp Thr Val Ile Ile Asp	
500	505	510
Ser Thr Val Gly Lys Asp	Thr Phe Phe Leu Ile Thr Trp Asn Ser	
515	520	525
Leu Pro Pro Ser Ile Ser	Leu Trp Asp Pro Ser Gly Thr Ile Met	
530	535	540
Glu Asn Phe Thr Val Asp	Ala Thr Ser Lys Met Ala Tyr Leu Ser	
545	550	555
Ile Pro Gly Thr Ala Lys	Val Gly Thr Trp Ala Tyr Asn Leu Gln	
560	565	570
Ala Lys Ala Asn Pro Glu	Thr Leu Thr Ile Thr Val Thr Ser Arg	
575	580	585
Ala Ala Asn Ser Ser Val	Pro Pro Ile Thr Val Asn Ala Lys Met	
590	595	600
Asn Lys Asp Val Asn Ser	Phe Pro Ser Pro Met Ile Val Tyr Ala	
605	610	615
Glu Ile Leu Gln Gly Tyr	Val Pro Val Leu Gly Ala Asn Val Thr	
620	625	630



Sequence Listing - P3230R1C1.txt

Ala Phe Ile Glu Ser Gln Asn Gly His Thr Glu Val Leu Glu Leu	635	640	645
Leu Asp Asn Gly Ala Gly Ala Asp Ser Phe Lys Asn Asp Gly Val	650	655	660
Tyr Ser Arg Tyr Phe Thr Ala Tyr Thr Glu Asn Gly Arg Tyr Ser	665	670	675
Leu Lys Val Arg Ala His Gly Gly Ala Asn Thr Ala Arg Leu Lys	680	685	690
Leu Arg Pro Pro Leu Asn Arg Ala Ala Tyr Ile Pro Gly Trp Val	695	700	705
Val Asn Gly Glu Ile Glu Ala Asn Pro Pro Arg Pro Glu Ile Asp	710	715	720
Glu Asp Thr Gln Thr Thr Leu Glu Asp Phe Ser Arg Thr Ala Ser	725	730	735
Gly Gly Ala Phe Val Val Ser Gln Val Pro Ser Leu Pro Leu Pro	740	745	750
Asp Gln Tyr Pro Pro Ser Gln Ile Thr Asp Leu Asp Ala Thr Val	755	760	765
His Glu Asp Lys Ile Ile Leu Thr Trp Thr Ala Pro Gly Asp Asn	770	775	780
Phe Asp Val Gly Lys Val Gln Arg Tyr Ile Ile Arg Ile Ser Ala	785	790	795
Ser Ile Leu Asp Leu Arg Asp Ser Phe Asp Asp Ala Leu Gln Val	800	805	810
Asn Thr Thr Asp Leu Ser Pro Lys Glu Ala Asn Ser Lys Glu Ser	815	820	825
Phe Ala Phe Lys Pro Glu Asn Ile Ser Glu Glu Asn Ala Thr His	830	835	840
Ile Phe Ile Ala Ile Lys Ser Ile Asp Lys Ser Asn Leu Thr Ser	845	850	855
Lys Val Ser Asn Ile Ala Gln Val Thr Leu Phe Ile Pro Gln Ala	860	865	870
Asn Pro Asp Asp Ile Asp Pro Thr Pro Thr Pro Thr Pro Thr Pro	875	880	885
Thr Pro Asp Lys Ser His Asn Ser Gly Val Asn Ile Ser Thr Leu	890	895	900

Sequence Listing - P3230R1C1.txt

Val Leu Ser Val Ile Gly Ser Val Val Ile Val Asn Phe Ile Leu  
 905 910 915

Ser Thr Thr Ile

<210> 71  
 <211> 3877  
 <212> DNA  
 <213> Homo Sapien

<400> 71  
 ctccttaggt ggaaaccctg ggagtagagt actgacagca aagaccggga 50  
 aagaccatac gtccccgggc aggggtgaca acaggtgtca tcttttgat 100  
 ctctgtgtg gctgccttc tatttcaagg aaagacgcca aggtaatttt 150  
 gaccagagg agcaatgatg tagccacctc ctaaccttc cttctgaac 200  
 cccagttat gccaggattt actagagagt gtcaactcaa ccagcaagcg 250  
 gctccttcgg cttaacttgt ggttgagga gagaacctt gtggggctgc 300  
 gttctcttag cagtgtcag aagtacttg cctgagggtg gaccagaaga 350  
 aaggaaagg cccctcttc tgttgctgc acatcaggaa ggctgtgatg 400  
 ggaatgaagg tgaaaactg gagatttcac ttcagtcatt gcttctgcct 450  
 gcaagatcat ctttaaaag tagagaagct gctctgtgtg gtggttaact 500  
 ccaagaggca gaactcgttc tagaaggaaa tggatgcaag cagctccggg 550  
 ggcccaaac gcatgcttc tgtgtctag ccaggggaag ccctccgtg 600  
 ggggccccg ctttgaggga tgccaccgt tctggacgca tggctgattc 650  
 ctgaatgatg atggttcgcc gggggctgct tgcgtggatt tcccgggtgg 700  
 tggtttgcct ggtgctcct tgctgtgcta tctctgtcct gtacatgtt 750  
 gcctgcaccc caaaagggtga cgaggagcag ctggcactgc ccagggcaa 800  
 cagccccacg gggaaggagg ggtaccaggc cgtccttcag gagtgggagg 850  
 agcagcaccg caactacgtg agcagcctga agcggcagat cgcacagctc 900  
 aaggaggagc tgcaggagag gagtgagcag ctcaggaatg ggcagtacca 950  
 agccagcgat gctgctggcc tgggtctgga caggagcccc ccagagaaaa 1000  
 cccaggccga cctctggcc ttctgcact cgcaggtgga caaggcagag 1050  
 gtgaatgctg gcgtcaagct ggccacagag tatgcagcag tgccttcga 1100

Sequence Listing - P3230R1C1.txt

tagctttact ctacagaagg tgtaccagct ggagactggc cttacccgcc 1150  
accccgagga gaagcctgtg aggaaggaca agcgggatga gttggtggaa 1200  
gccattgaat cagccttgga gaccctgaac aatcctgcag agaacagccc 1250  
caatcaccgt ccttacacgg cctctgattt catagaaggg atctaccgaa 1300  
cagaaaggga caaaggga ttgtatgagc tcacctcaa aggggaccac 1350  
aaacacgaat tcaaacggct catcttattt cgaccattca gccccatcat 1400  
gaaagtgaat aatgaaaagc tcaacatggc caacacgctt atcaatgtta 1450  
tcgtgcctct agcaaaaagg gtggacaagt tccggcagtt catgcagaat 1500  
ttcaggggaga tgtgcattga gcaggatggg agagtccatc tactgttgt 1550  
ttactttggg aaagaagaaa taaatgaagt caaaggaata cttgaaaaca 1600  
cttccaaagc tgccaacttc aggaacttta cttcatcca gctgaatgga 1650  
gaattttctc ggggaaaggg acttgatgtt ggagcccgct tctggaaggg 1700  
aagcaacgct cttctctttt tctgtgatgt ggacatctac ttcacatctg 1750  
aattcctcaa tacgtgtagg ctgaatacac agccaggga gaaggtattt 1800  
tatccagttc ttttcagtca gtacaatcct ggcataatat acggccacca 1850  
tgatgcagtc cctcccttgg aacagcagct ggtcataaag aaggaaactg 1900  
gattttggag agactttgga ttgggatga cgtgtcagta tcggtcagac 1950  
ttcatcaata taggtgggtt tgatctggac atcaaaggct ggggcggaga 2000  
ggatgtgcac ctttatcgca agtatctcca cagcaacctc atagtggtag 2050  
ggacgcctgt gcgaggactc ttccacctt ggcatgagaa gcgctgcatg 2100  
gacgagctga ccccgagca gtacaagatg tgcatgcagt ccaaggccat 2150  
gaacgaggca tcccacggcc agctgggcat gctggtgttc aggcacgaga 2200  
tagaggctca ctttcgcaa cagaaacaga agacaagtag caaaaaaaca 2250  
tgaactccca gagaaggatt gtgggagaca cttttcttt cttttgcaa 2300  
ttactgaaag tggctgcaac agagaaaaga cttcataaa ggacgacaaa 2350  
agaattggac tgatgggtca gagatgagaa agcctccgat ttctctctgt 2400  
tgggctttt acaacagaaa tcaaatctc cgctttgcct gcaaaagtaa 2450  
cccagttgca cctgtgaag tgtctgacaa aggcagaatg cttgtgagat 2500

Sequence Listing - P3230R1C1.txt

tataagccta atggtgtgga ggttttgatg gtgtttacaa tacactgaga 2550  
cctgttggtt tgtgtgctca ttgaaatatt catgatttaa gagcagtttt 2600  
gtaaaaaatt cattagcatg aaaggcaagc atatttctcc tcatatgaat 2650  
gagcctatca gcagggtctt agtttctagg aatgctaaaa tatcagaagg 2700  
caggagagga gataggctta ttatgatact agtgagtaca ttaagtaaaa 2750  
taaaatggac cagaaaagaa aagaaacat aaatatcgtg tcatattttc 2800  
cccaagatta accaaaaata atctgcttat ctttttggtt gtccttttaa 2850  
ctgtctcgt tttttcttt tatttaaaaa tgcacttttt ttcccttggtg 2900  
agttatagtc tgcttattta attaccactt tgcaagcctt acaagagagc 2950  
acaagttggc ctacattttt atatttttta agaagatact ttgagatgca 3000  
ttatgagaac ttcagttca aagcatcaaa ttgatgccat atccaaggac 3050  
atgccaaatg ctgattctgt caggcactga atgtcaggca ttgagacata 3100  
gggaaggaat ggtttgtact aatacagacg tacagatact ttctctgaag 3150  
agtattttcg aagaggagca actgaacact ggaggaaaag aaaatgacac 3200  
tttctgcttt acagaaaagg aaactcattc agactggtga tatcgtgatg 3250  
tacctaaaag tcagaaacca cattttctcc tcagaagtag ggaccgcttt 3300  
cttacctgtt taaataaacc aaagtatacc gtgtgaacca acaatctct 3350  
tttcaaaaca ggggtgctct cctggcttct ggcttcata agaagaaatg 3400  
gagaaaaata tatatatata tatatatatt gtgaaagatc aatccatctg 3450  
ccagaatcta gtgggatgga agtttttgct acatgttatc caccacaggc 3500  
cagggtggaag taactgaatt attttttaaa ttaagcagtt ctactcaatc 3550  
accaagatgc ttctgaaaat tgcattttat taccatttca aactattttt 3600  
taaaaataaa tacagttaac atagagtggg ttcttcattc atgtgaaaat 3650  
tattagccag caccagatgc atgagctaata tatctctttg agtccttgct 3700  
tctgtttgct cacagtaaac tcattgttta aaagcttcaa gaacattcaa 3750  
gctgttggtg tgtaaaaaaa tgcattgtat tgattgtac tggtagttta 3800  
tgaaatttaa ttaaaacaca ggccatgaat ggaaggtggt attgcacagc 3850

Sequence Listing - P3230R1C1.txt

taataaaata tgatttgagg atatgaa 3877

<210> 72

<211> 532

<212> PRT

<213> Homo Sapien

<400> 72

Met Met Met Val Arg Arg Gly Leu Leu Ala Trp Ile Ser Arg Val  
1 5 10 15

Val Val Leu Leu Val Leu Leu Cys Cys Ala Ile Ser Val Leu Tyr  
20 25 30

Met Leu Ala Cys Thr Pro Lys Gly Asp Glu Glu Gln Leu Ala Leu  
35 40 45

Pro Arg Ala Asn Ser Pro Thr Gly Lys Glu Gly Tyr Gln Ala Val  
50 55 60

Leu Gln Glu Trp Glu Glu Gln His Arg Asn Tyr Val Ser Ser Leu  
65 70 75

Lys Arg Gln Ile Ala Gln Leu Lys Glu Glu Leu Gln Glu Arg Ser  
80 85 90

Glu Gln Leu Arg Asn Gly Gln Tyr Gln Ala Ser Asp Ala Ala Gly  
95 100 105

Leu Gly Leu Asp Arg Ser Pro Pro Glu Lys Thr Gln Ala Asp Leu  
110 115 120

Leu Ala Phe Leu His Ser Gln Val Asp Lys Ala Glu Val Asn Ala  
125 130 135

Gly Val Lys Leu Ala Thr Glu Tyr Ala Ala Val Pro Phe Asp Ser  
140 145 150

Phe Thr Leu Gln Lys Val Tyr Gln Leu Glu Thr Gly Leu Thr Arg  
155 160 165

His Pro Glu Glu Lys Pro Val Arg Lys Asp Lys Arg Asp Glu Leu  
170 175 180

Val Glu Ala Ile Glu Ser Ala Leu Glu Thr Leu Asn Asn Pro Ala  
185 190 195

Glu Asn Ser Pro Asn His Arg Pro Tyr Thr Ala Ser Asp Phe Ile  
200 205 210

Glu Gly Ile Tyr Arg Thr Glu Arg Asp Lys Gly Thr Leu Tyr Glu  
215 220 225

Leu Thr Phe Lys Gly Asp His Lys His Glu Phe Lys Arg Leu Ile  
230 235 240

Sequence Listing - P3230R1C1.txt

Leu Phe Arg Pro Phe Ser Pro Ile Met Lys Val Lys Asn Glu Lys  
 245 250 255  
 Leu Asn Met Ala Asn Thr Leu Ile Asn Val Ile Val Pro Leu Ala  
 260 265 270  
 Lys Arg Val Asp Lys Phe Arg Gln Phe Met Gln Asn Phe Arg Glu  
 275 280 285  
 Met Cys Ile Glu Gln Asp Gly Arg Val His Leu Thr Val Val Tyr  
 290 295 300  
 Phe Gly Lys Glu Glu Ile Asn Glu Val Lys Gly Ile Leu Glu Asn  
 305 310 315  
 Thr Ser Lys Ala Ala Asn Phe Arg Asn Phe Thr Phe Ile Gln Leu  
 320 325 330  
 Asn Gly Glu Phe Ser Arg Gly Lys Gly Leu Asp Val Gly Ala Arg  
 335 340 345  
 Phe Trp Lys Gly Ser Asn Val Leu Leu Phe Phe Cys Asp Val Asp  
 350 355 360  
 Ile Tyr Phe Thr Ser Glu Phe Leu Asn Thr Cys Arg Leu Asn Thr  
 365 370 375  
 Gln Pro Gly Lys Lys Val Phe Tyr Pro Val Leu Phe Ser Gln Tyr  
 380 385 390  
 Asn Pro Gly Ile Ile Tyr Gly His His Asp Ala Val Pro Pro Leu  
 395 400 405  
 Glu Gln Gln Leu Val Ile Lys Lys Glu Thr Gly Phe Trp Arg Asp  
 410 415 420  
 Phe Gly Phe Gly Met Thr Cys Gln Tyr Arg Ser Asp Phe Ile Asn  
 425 430 435  
 Ile Gly Gly Phe Asp Leu Asp Ile Lys Gly Trp Gly Gly Glu Asp  
 440 445 450  
 Val His Leu Tyr Arg Lys Tyr Leu His Ser Asn Leu Ile Val Val  
 455 460 465  
 Arg Thr Pro Val Arg Gly Leu Phe His Leu Trp His Glu Lys Arg  
 470 475 480  
 Cys Met Asp Glu Leu Thr Pro Glu Gln Tyr Lys Met Cys Met Gln  
 485 490 495  
 Ser Lys Ala Met Asn Glu Ala Ser His Gly Gln Leu Gly Met Leu  
 500 505 510

Sequence Listing - P3230R1C1.txt

Val Phe Arg His Glu Ile Glu Ala His Leu Arg Lys Gln Lys Gln  
515 520 525

Lys Thr Ser Ser Lys Lys Thr  
530

<210> 73  
<211> 1701  
<212> DNA  
<213> Homo Sapien  
<220>  
<221> unsure  
<222> 1528  
<223> unknown base

<400> 73  
gagactgcag agggagataa agagagaggg caaagaggca gcaagagatt 50  
tgtcttgggg atccagaaac ccatgatacc ctactgaaca ccgaatcccc 100  
tggaagccca cagagacaga gacagcaaga gaagcagaga taaatacact 150  
cacgccagga gctcgtctgc tctctcttc tctctctcac tcctccctcc 200  
ctctctctct gctgtccta gtcctctagt cctcaaattc ccagtcctcc 250  
gcaccccttc ctgggacact atgttgttct ccgccctct gctggaggtg 300  
atttggatcc tggctgcaga tgggggtcaa cactggacgt atgagggccc 350  
acatggtcag gaccattggc cagcctctta ccctgagtgt ggaacaatg 400  
cccagtcgcc catcgatatt cagacagaca gtgtgacatt tgaccctgat 450  
ttgctgtctc tgcagcccca cggatatgac cagcctggca ccgagccttt 500  
ggacctgcac aacaatggcc acacagtga actctctctg ccctctaccc 550  
tgtatctggg tggacttccc cgaaaatatg tagctgccca gctccacctg 600  
cactgggggtc agaaaggatc cccagggggg tcagaacacc agatcaacag 650  
tgaagccaca ttgacagagc tccacattgt acattatgac tctgattcct 700  
atgacagctt gagtgaggct gctgagaggg ctacgggcct ggctgtcctg 750  
ggcatcctaa ttgaggtggg tgagactaag aatatagctt atgaacacat 800  
tctgagtcac ttgcatgaag tcaggcataa agatcagaag acctcagtgc 850  
ctcccttcaa cctaagagag ctgtcccca aacagctggg gcagtacttc 900  
cgctacaatg gctcgtctac aactccccct tgctaccaga gtgtgctctg 950  
gacagttttt tatagaaggt cccagatttc aatggaacag ctggaaaagc 1000

# Sequence Listing - P3230R1C1.txt

ttcaggggac attgttctcc acagaagagg agccctctaa gcttctggta 1050  
 cagaactacc gagcccttca gcctctcaat cagcgcatgg tctttgcttc 1100  
 tttcatccaa gcaggatcct cgtataccac aggtgaaatg ctgagtctag 1150  
 gtgtaggaat cttggttggc tgtctctgcc ttctctggc tgtttatttc 1200  
 attgctagaa agattcggaa gaagaggctg gaaaaccgaa agagtgtggt 1250  
 cttcacctca gcacaagcca cgactgaggc ataaattcct tctcagatac 1300  
 catggatgtg gatgacttcc cttcatgcct atcaggaagc ctctaaaatg 1350  
 ggggtgtagga tctggccaga aactctgtag gagtagtaag cagatgtcct 1400  
 cctccccctg gacatctctt agagaggaat ggaccaggc tgtcattcca 1450  
 ggaagaactg cagagccttc agcctctcca aacatgtagg aggaaatgag 1500  
 gaaatcgctg tgtgtttaat gcagaganca aactctgttt agttgcaggg 1550  
 gaagtttggg atatacccca aagtcctcta cccctcact tttatggccc 1600  
 tttccctaga tatactgcgg gatctctcct taggataaag agttgctgtt 1650  
 gaagttgtat atttttgatc aatatatttg gaaattaaag tttctgactt 1700  
 t 1701

<210> 74  
 <211> 337  
 <212> PRT  
 <213> Homo Sapien

<400> 74  
 Met Leu Phe Ser Ala Leu Leu Leu Glu Val Ile Trp Ile Leu Ala  
 1 5 10 15  
 Ala Asp Gly Gly Gln His Trp Thr Tyr Glu Gly Pro His Gly Gln  
 20 25 30  
 Asp His Trp Pro Ala Ser Tyr Pro Glu Cys Gly Asn Asn Ala Gln  
 35 40 45  
 Ser Pro Ile Asp Ile Gln Thr Asp Ser Val Thr Phe Asp Pro Asp  
 50 55 60  
 Leu Pro Ala Leu Gln Pro His Gly Tyr Asp Gln Pro Gly Thr Glu  
 65 70 75  
 Pro Leu Asp Leu His Asn Asn Gly His Thr Val Gln Leu Ser Leu  
 80 85 90



Sequence Listing - P3230R1C1.txt

Pro Ser Thr Leu Tyr Leu Gly Gly Leu Pro Arg Lys Tyr Val Ala  
 95 100 105

Ala Gln Leu His Leu His Trp Gly Gln Lys Gly Ser Pro Gly Gly  
 110 115 120

Ser Glu His Gln Ile Asn Ser Glu Ala Thr Phe Ala Glu Leu His  
 125 130 135

Ile Val His Tyr Asp Ser Asp Ser Tyr Asp Ser Leu Ser Glu Ala  
 140 145 150

Ala Glu Arg Pro Gln Gly Leu Ala Val Leu Gly Ile Leu Ile Glu  
 155 160 165

Val Gly Glu Thr Lys Asn Ile Ala Tyr Glu His Ile Leu Ser His  
 170 175 180

Leu His Glu Val Arg His Lys Asp Gln Lys Thr Ser Val Pro Pro  
 185 190 195

Phe Asn Leu Arg Glu Leu Leu Pro Lys Gln Leu Gly Gln Tyr Phe  
 200 205 210

Arg Tyr Asn Gly Ser Leu Thr Thr Pro Pro Cys Tyr Gln Ser Val  
 215 220 225

Leu Trp Thr Val Phe Tyr Arg Arg Ser Gln Ile Ser Met Glu Gln  
 230 235 240

Leu Glu Lys Leu Gln Gly Thr Leu Phe Ser Thr Glu Glu Glu Pro  
 245 250 255

Ser Lys Leu Leu Val Gln Asn Tyr Arg Ala Leu Gln Pro Leu Asn  
 260 265 270

Gln Arg Met Val Phe Ala Ser Phe Ile Gln Ala Gly Ser Ser Tyr  
 275 280 285

Thr Thr Gly Glu Met Leu Ser Leu Gly Val Gly Ile Leu Val Gly  
 290 295 300

Cys Leu Cys Leu Leu Leu Ala Val Tyr Phe Ile Ala Arg Lys Ile  
 305 310 315

Arg Lys Lys Arg Leu Glu Asn Arg Lys Ser Val Val Phe Thr Ser  
 320 325 330

Ala Gln Ala Thr Thr Glu Ala  
 335

<210> 75

<211> 1743

<212> DNA

<213> Homo Sapien

# Sequence Listing - P3230R1C1.txt

<400> 75

tgccgctgcc gccgctgctg ctgttgctcc tggcggcgcc ttggggacgg 50  
gcagttccct gtgtctctgg tggtttgctt aaacctgcaa acatcacctt 100  
cttatccatc aacatgaaga atgtcttaca atggactcca ccagaggggtc 150  
ttcaaggagt taaagttact tacactgtgc agtatttcat cacaaattgg 200  
cccaccagag gtggcactga ctacagatga gaagtcatt tctgtgtcc 250  
tgacagctcc agagaagtgg aagagaaatc cagaagacct tcctgtttcc 300  
atgaacaaa tatactcaa tctgaagtat aacgtgtctg tgtgaatac 350  
taaatcaaac agaacgtggt ccagtggtg gaaccaaccac acgctggtgc 400  
tcacctggct ggagccgaac actctttact gcgtacacgt ggagtccttc 450  
gtcccagggc cccctgcgg tgctcagcct tctgagaagc agtgtgccag 500  
gactttgaaa gatcaatcat cagagttcaa ggctaaaatc atcttctggt 550  
atgttttgcc catatctatt accgtgtttc tttttctgt gatgggctat 600  
tccatctacc gatatatcca cgttggcaaa gagaaacacc cagcaaattt 650  
gattttgatt tatggaaatg aatttgaaa aagattcttt gtgcctgctg 700  
aaaaaatcgt gattaacttt atcaccctca atatctcgga tgattctaaa 750  
atttctatc aggatatgag ttactggga aaaagcagtg atgtatccag 800  
ccttaatgat cctcagccca gcgggaacct gagggcccct caggaggaag 850  
aggaggtgaa acatttaggg tatgcttcgc atttgatgga aatttttgt 900  
gactctgaag aaaacacgga aggtacttct ctcaccagc aagagtcctt 950  
cagcagaaca ataccccgga ataaaacagt cattgaatat gaatatgatg 1000  
tcagaaccac tgacatttgt gcggggcctg aagagcagga gctcagtttg 1050  
caggaggagg tgtccacaca aggaacatta ttggagtcgc aggcagcgtt 1100  
ggcagtcttg ggcccgcaaa cgttacagta ctcatcacc cctcagctcc 1150  
aagacttaga cccctggcg caggagcaca cagactcgga ggaggggccc 1200  
gaggaagagc catcgacgac cctggtcgac tgggatcccc aaactggcag 1250  
gctgtgtatt ccttcgctgt ccagcttcga ccaggattca gagggctgcg 1300  
agccttctga gggggatggg ctcggagagg agggcttctt atctagactc 1350

Sequence Listing - P3230R1C1.txt

tatgaggagc cggctccaga caggccacca ggagaaaatg aaacctatct 1400

catgcaattc atggaggaat ggggggtata tgtgcagatg gaaaactgat 1450

gccaacactt ccttttgcct tttgtttcct gtgcaaaca gtgagtcacc 1500

cctttgatcc cagccataaa gtacctggga tgaaagaagt tttttcagt 1550

ttgtcagtgt ctgtgagaat tacttatttc ttttctctat tctcatagca 1600

cgtgtgtgat tggttcatgc atgtaggctt cttacaatg atggtgggcc 1650

tctggagtcc aggggctggc cggttgttct atgcagagaa agcagtcaat 1700

aatgtttgc cagactgggt gcagaattta ttcaggtggg tgt 1743

<210> 76

<211> 442

<212> PRT

<213> Homo Sapien

<400> 76

Met Ser Tyr Asn Gly Leu His Gln Arg Val Phe Lys Glu Leu Lys  
1 5 10 15

Leu Leu Thr Leu Cys Ser Ile Ser Ser Gln Ile Gly Pro Pro Glu  
20 25 30

Val Ala Leu Thr Thr Asp Glu Lys Ser Ile Ser Val Val Leu Thr  
35 40 45

Ala Pro Glu Lys Trp Lys Arg Asn Pro Glu Asp Leu Pro Val Ser  
50 55 60

Met Gln Gln Ile Tyr Ser Asn Leu Lys Tyr Asn Val Ser Val Leu  
65 70 75

Asn Thr Lys Ser Asn Arg Thr Trp Ser Gln Cys Val Thr Asn His  
80 85 90

Thr Leu Val Leu Thr Trp Leu Glu Pro Asn Thr Leu Tyr Cys Val  
95 100 105

His Val Glu Ser Phe Val Pro Gly Pro Pro Arg Arg Ala Gln Pro  
110 115 120

Ser Glu Lys Gln Cys Ala Arg Thr Leu Lys Asp Gln Ser Ser Glu  
125 130 135

Phe Lys Ala Lys Ile Ile Phe Trp Tyr Val Leu Pro Ile Ser Ile  
140 145 150

Thr Val Phe Leu Phe Ser Val Met Gly Tyr Ser Ile Tyr Arg Tyr  
155 160 165

Ile His Val Gly Lys Glu Lys His Pro Ala Asn Leu Ile Leu Ile

Sequence Listing - P3230R1C1.txt

170	175	180
Tyr Gly Asn Glu Phe Asp Lys Arg Phe Phe Val Pro Ala Glu Lys		
185	190	195
Ile Val Ile Asn Phe Ile Thr Leu Asn Ile Ser Asp Asp Ser Lys		
200	205	210
Ile Ser His Gln Asp Met Ser Leu Leu Gly Lys Ser Ser Asp Val		
215	220	225
Ser Ser Leu Asn Asp Pro Gln Pro Ser Gly Asn Leu Arg Pro Pro		
230	235	240
Gln Glu Glu Glu Glu Val Lys His Leu Gly Tyr Ala Ser His Leu		
245	250	255
Met Glu Ile Phe Cys Asp Ser Glu Glu Asn Thr Glu Gly Thr Ser		
260	265	270
Leu Thr Gln Gln Glu Ser Leu Ser Arg Thr Ile Pro Pro Asp Lys		
275	280	285
Thr Val Ile Glu Tyr Glu Tyr Asp Val Arg Thr Thr Asp Ile Cys		
290	295	300
Ala Gly Pro Glu Glu Gln Glu Leu Ser Leu Gln Glu Glu Val Ser		
305	310	315
Thr Gln Gly Thr Leu Leu Glu Ser Gln Ala Ala Leu Ala Val Leu		
320	325	330
Gly Pro Gln Thr Leu Gln Tyr Ser Tyr Thr Pro Gln Leu Gln Asp		
335	340	345
Leu Asp Pro Leu Ala Gln Glu His Thr Asp Ser Glu Glu Gly Pro		
350	355	360
Glu Glu Glu Pro Ser Thr Thr Leu Val Asp Trp Asp Pro Gln Thr		
365	370	375
Gly Arg Leu Cys Ile Pro Ser Leu Ser Ser Phe Asp Gln Asp Ser		
380	385	390
Glu Gly Cys Glu Pro Ser Glu Gly Asp Gly Leu Gly Glu Glu Gly		
395	400	405
Leu Leu Ser Arg Leu Tyr Glu Glu Pro Ala Pro Asp Arg Pro Pro		
410	415	420
Gly Glu Asn Glu Thr Tyr Leu Met Gln Phe Met Glu Glu Trp Gly		
425	430	435
Leu Tyr Val Gln Met Glu Asn		
440		

Sequence Listing - P3230R1C1.txt

<210> 77

<211> 1636

<212> DNA

<213> Homo Sapien

<400> 77

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gctgccctct gacacctggg aagatggccg gcccgaggac cttaccctt 100  
ctctgtggtt tgctggcagc caccttgatc caagccaccc tcagtccac 150  
tcagttctc atcctcggcc caaaagtcac caaagaaaag ctgacacagg 200  
agctgaagga ccacaacgcc accagcatcc tgcagcagct gccgctgctc 250  
agtgccatgc gggaaaagcc agccggaggc atccctgtgc tgggcagcct 300  
ggatgaacacc gtcctgaagc acatcatctg gctgaaggct atcacagcta 350  
acatcctcca gctgcagggt aagccctcgg ccaatgacca ggagctgcta 400  
gtcaagatcc ccctggacat ggtggctgga ttcaacacgc ccctgggtcaa 450  
gaccatcgtg gagttccaca tgacgactga ggccaagcc accatccgca 500  
tggacaccag tgcaagtggc cccaccgcc tggctctcag tgactgtgcc 550  
accagccatg ggagcctgcg catccaactg ctgtataagc tctccttct 600  
ggatgaacgcc ttagctaagc aggtcatgaa cctcctagt ccatccctgc 650  
ccaatctagt gaaaaaccag ctgtgtcccg tgatcgaggc ttccttcaat 700  
ggcatgtatg cagacctctc gcagctgggt aagggtgcca ttcctcag 750  
cattgaccgt ctggagtttg accttctgta tcctgccatc aagggtgaca 800  
ccattcagct ctacctgggg gccaaagtgt tggactcaca gggaaagggt 850  
accaagtggg tcaataactc tgcagcttcc ctgacaatgc ccaccctgga 900  
caacatcccg ttcagcctca tcgtgagtca ggacgtgggt aaagctgcag 950  
tggctgctgt gctctctcca gaagaattca tggctctgtt ggactctgtg 1000  
cttctgaga gtgccatcg gctgaagtca agcatcgggc tgatcaatga 1050  
aaaggctgca gataagctgg gatctacca gatcgtgaag atcctaactc 1100  
aggacactcc cgagtttttt atagaccaag gccatgcaa ggtggcccaa 1150  
ctgatcgtgc tggaaagtgt tccctccagt gaagccctcc gcccttgtt 1200  
cacctgggc atcgaagcca gctcggaagc tcagttttac accaaagggt 1250

Sequence Listing - P3230R1C1.txt

accaacttat actcaacttg aataacatca gctctgatcg gatccagctg 1300  
 atgaactctg ggattggctg gttccaacct gatgttctga aaaacatcat 1350  
 cactgagatc atccactcca tctgtgtgcc gaaccagaat ggcaaattaa 1400  
 gatctggggt cccagtgtca ttggtgaagg ccttgggatt cgaggcagct 1450  
 gagtctctac tgaccaagga tgcccttggt cttactccag cctccttggt 1500  
 gaaaccagc tctctgtct cccagtgaag acttggatgg cagccatcag 1550  
 ggaaggctgg gtcccagctg ggagtatggg tgtgagctct atagaccatc 1600  
 cctctctgca atcaataaac acttgctgt gaaaaa 1636

<210> 78

<211> 484

<212> PRT

<213> Homo Sapien

<400> 78

Met Ala Gly Pro Trp Thr Phe Thr Leu Leu Cys Gly Leu Leu Ala  
 1 5 10 15

Ala Thr Leu Ile Gln Ala Thr Leu Ser Pro Thr Ala Val Leu Ile  
 20 25 30

Leu Gly Pro Lys Val Ile Lys Glu Lys Leu Thr Gln Glu Leu Lys  
 35 40 45

Asp His Asn Ala Thr Ser Ile Leu Gln Gln Leu Pro Leu Leu Ser  
 50 55 60

Ala Met Arg Glu Lys Pro Ala Gly Gly Ile Pro Val Leu Gly Ser  
 65 70 75

Leu Val Asn Thr Val Leu Lys His Ile Ile Trp Leu Lys Val Ile  
 80 85 90

Thr Ala Asn Ile Leu Gln Leu Gln Val Lys Pro Ser Ala Asn Asp  
 95 100 105

Gln Glu Leu Leu Val Lys Ile Pro Leu Asp Met Val Ala Gly Phe  
 110 115 120

Asn Thr Pro Leu Val Lys Thr Ile Val Glu Phe His Met Thr Thr  
 125 130 135

Glu Ala Gln Ala Thr Ile Arg Met Asp Thr Ser Ala Ser Gly Pro  
 140 145 150

Thr Arg Leu Val Leu Ser Asp Cys Ala Thr Ser His Gly Ser Leu  
 155 160 165

Sequence Listing - P3230R1C1.txt

Arg Ile Gln Leu Leu Tyr Lys Leu Ser Phe Leu Val Asn Ala Leu  
170 175 180

Ala Lys Gln Val Met Asn Leu Leu Val Pro Ser Leu Pro Asn Leu  
185 190 195

Val Lys Asn Gln Leu Cys Pro Val Ile Glu Ala Ser Phe Asn Gly  
200 205 210

Met Tyr Ala Asp Leu Leu Gln Leu Val Lys Val Pro Ile Ser Leu  
215 220 225

Ser Ile Asp Arg Leu Glu Phe Asp Leu Leu Tyr Pro Ala Ile Lys  
230 235 240

Gly Asp Thr Ile Gln Leu Tyr Leu Gly Ala Lys Leu Leu Asp Ser  
245 250 255

Gln Gly Lys Val Thr Lys Trp Phe Asn Asn Ser Ala Ala Ser Leu  
260 265 270

Thr Met Pro Thr Leu Asp Asn Ile Pro Phe Ser Leu Ile Val Ser  
275 280 285

Gln Asp Val Val Lys Ala Ala Val Ala Ala Val Leu Ser Pro Glu  
290 295 300

Glu Phe Met Val Leu Leu Asp Ser Val Leu Pro Glu Ser Ala His  
305 310 315

Arg Leu Lys Ser Ser Ile Gly Leu Ile Asn Glu Lys Ala Ala Asp  
320 325 330

Lys Leu Gly Ser Thr Gln Ile Val Lys Ile Leu Thr Gln Asp Thr  
335 340 345

Pro Glu Phe Phe Ile Asp Gln Gly His Ala Lys Val Ala Gln Leu  
350 355 360

Ile Val Leu Glu Val Phe Pro Ser Ser Glu Ala Leu Arg Pro Leu  
365 370 375

Phe Thr Leu Gly Ile Glu Ala Ser Ser Glu Ala Gln Phe Tyr Thr  
380 385 390

Lys Gly Asp Gln Leu Ile Leu Asn Leu Asn Asn Ile Ser Ser Asp  
395 400 405

Arg Ile Gln Leu Met Asn Ser Gly Ile Gly Trp Phe Gln Pro Asp  
410 415 420

Val Leu Lys Asn Ile Ile Thr Glu Ile Ile His Ser Ile Leu Leu  
425 430 435

Sequence Listing - P3230R1C1.txt

Pro Asn Gln Asn Gly Lys Leu Arg Ser Gly Val Pro Val Ser Leu  
440 445 450

Val Lys Ala Leu Gly Phe Glu Ala Ala Glu Ser Ser Leu Thr Lys  
455 460 465

Asp Ala Leu Val Leu Thr Pro Ala Ser Leu Trp Lys Pro Ser Ser  
470 475 480

Pro Val Ser Gln

<210> 79

<211> 1475

<212> DNA

<213> Homo Sapien

<400> 79

gagagaagtc agcctggcag agagactctg aaatgagggga ttagaggtgt 50  
tcaaggagca agagcttcag cctgaagaca agggagcagt ccctgaagac 100  
gcttctactg agaggtctgc catggcctct ctggcctcc aacttgtggg 150  
ctacatccta ggccttctgg ggcttttggg cacactgggt gccatgctgc 200  
tccccagctg gaaaacaagt tcttatgtcg gtgccagcat tgtgacagca 250  
gttggcttct ccaagggcct ctggatggaa tgtgccacac acagcacagg 300  
catcaccag tgtgacatct atagaccct tctgggcctg cccgctgaca 350  
tccaggctgc ccaggccatg atggtgacat ccagtgaat ctctccctg 400  
gcctgcatta tctctgtggt gggcatgaga tgcacagtct tctgccagga 450  
atcccgagcc aaagacagag tggcggtagc aggtggagtc ttttcatcc 500  
ttggaggcct cctgggattc attcctgttg cctggaatct tcatgggatc 550  
ctacgggact tctactcacc actggtgcct gacagcatga aatttgagat 600  
tgagaggct ctttacttgg gcattatttc ttcctgttc tccctgatag 650  
ctggaatcat cctctgcttt tctgctcat ccagagaaa tcgctccaac 700  
tactacgatg cctaccaagc ccaacctctt gccacaagga gcttccaag 750  
gcctgggtcaa cctcccaaag tcaagagtga gttcaattcc tacagcctga 800  
cagggtatgt gtgaagaacc agggggcaga gctgggggggt ggctgggtct 850  
gtgaaaaaca gtggacagca ccccgagggc cacaggtgag ggacactacc 900  
actggatcgt gtcagaaggt gctgctgagg atagactgac ttggccatt 950



Sequence Listing - P3230R1C1.txt

ggattgagca aaggcagaaa tgggggctag tgtaacagca tgcaggtga 1000  
 attgccaagg atgctcgcca tgccagcctt tctgttttcc tcaccttgct 1050  
 gctccctgc cctaagctcc caacctcaa ctgaaaccc cattccctta 1100  
 agccaggact cagaggatcc cttgccctc tggtttacct gggactccat 1150  
 ccccaaacc actaatcaca tccactgac tgaccctctg tgatcaaaga 1200  
 ccctctctct ggctgagggt ggctcttagc tcattgctgg ggatgggaag 1250  
 gagaagcagt ggctttgtg ggcattgctc taacctactt ctcaagcttc 1300  
 cctcaaaga aactgattgg ccctggaacc tccatccac tctgttatg 1350  
 actccacagt gtccagacta atttgtgat gaactgaaat aaaaccatcc 1400  
 tacggtatcc agggaacaga aagcaggatg caggatggga ggacaggaag 1450  
 gcagcctggg acatttaaaa aaata 1475

<210> 80

<211> 230

<212> PRT

<213> Homo Sapien

<400> 80

Met Ala Ser Leu Gly Leu Gln Leu Val Gly Tyr Ile Leu Gly Leu  
 1 5 10 15

Leu Gly Leu Leu Gly Thr Leu Val Ala Met Leu Leu Pro Ser Trp  
 20 25 30

Lys Thr Ser Ser Tyr Val Gly Ala Ser Ile Val Thr Ala Val Gly  
 35 40 45

Phe Ser Lys Gly Leu Trp Met Glu Cys Ala Thr His Ser Thr Gly  
 50 55 60

Ile Thr Gln Cys Asp Ile Tyr Ser Thr Leu Leu Gly Leu Pro Ala  
 65 70 75

Asp Ile Gln Ala Ala Gln Ala Met Met Val Thr Ser Ser Ala Ile  
 80 85 90

Ser Ser Leu Ala Cys Ile Ile Ser Val Val Gly Met Arg Cys Thr  
 95 100 105

Val Phe Cys Gln Glu Ser Arg Ala Lys Asp Arg Val Ala Val Ala  
 110 115 120

Gly Gly Val Phe Phe Ile Leu Gly Gly Leu Leu Gly Phe Ile Pro  
 125 130 135

Sequence Listing - P3230R1C1.txt

Val Ala Trp Asn Leu His Gly Ile Leu Arg Asp Phe Tyr Ser Pro  
140 145 150

Leu Val Pro Asp Ser Met Lys Phe Glu Ile Gly Glu Ala Leu Tyr  
155 160 165

Leu Gly Ile Ile Ser Ser Leu Phe Ser Leu Ile Ala Gly Ile Ile  
170 175 180

Leu Cys Phe Ser Cys Ser Ser Gln Arg Asn Arg Ser Asn Tyr Tyr  
185 190 195

Asp Ala Tyr Gln Ala Gln Pro Leu Ala Thr Arg Ser Ser Pro Arg  
200 205 210

Pro Gly Gln Pro Pro Lys Val Lys Ser Glu Phe Asn Ser Tyr Ser  
215 220 225

Leu Thr Gly Tyr Val  
230

<210> 81

<211> 1732

<212> DNA

<213> Homo Sapien

<400> 81

cccacgcgtc cgcgcctctc cttctgctg gaccttcctt cgtctctcca 50

tctctcctc cttccccgc gttctcttc cacctttctc ttcttccac 100

cttagacctc cttctctgcc ctctttctt gccaccgct gcttctggc 150

ccttctcca cccgctcta gcagcagacc tctgggggc tgtgggtga 200

tctgtggccc ctgtgcctc gtgtccttt cgtctcctt cctcccgact 250

ccgtccccg accagcggc tgaccctggg gaaaggatgg ttcccgaggt 300

gagggtctc tctccttgc tgggactgc gctgctctg ttccccctgg 350

actcccacgc tcgagccgc ccagacatgt tctgccttt ccatgggaag 400

agatactccc ccggcgagag ctggcacccc tacttgagc cacaaggcct 450

gatgtactgc ctgcgtgta cctgctcaga gggcgcccat gtgagttgtt 500

accgcctcca ctgtccgct gtccactgcc cccagcctgt gacggagcca 550

cagcaatgct gtccaagtg tgtggaacct cacactcct ctggactccg 600

ggccccacca aagtcttgc agcacaacgg gaccatgtac caacacggag 650

agatcttcag tgccatgag ctgttccct cccgctgcc caaccagtgt 700

gtctctgca gctgcacaga gggccagatc tactgcggcc tcacaacctg 750

Sequence Listing - P3230R1C1.txt

ccccgaacca ggctgcccag caccctccc actgccagac tctgctgcc 800  
 aagcctgcaa agatgaggca agtgagcaat cggatgaaga ggacagtgtg 850  
 cagtcgctcc atgggggtgag acatcctcag gatccatgtt ccagtgatgc 900  
 tgggagaaaag agaggcccg gaccccagc cccactggc ctcagcgccc 950  
 ctctgagctt catccctgc cacttcagac ccaagggagc aggcagcaca 1000  
 actgtcaaga tcgtctgaa ggagaaacat aagaaagcct gtgtgcatgg 1050  
 cgggaagacg tactcccacg gggaggtgtg gcaccggcc ttccgtgcct 1100  
 tcggcccctt gccctgcatc ctatgcacct gtgaggatgg ccgccaggac 1150  
 tgccagcgtg tgacctgtcc caccgagtac cctgccgtc accccgagaa 1200  
 agtggctggg aagtgtgca agattgccc agaggacaaa gcagaccctg 1250  
 gccacagtga gatcagttct accaggtgtc ccaaggcacc gggccgggtc 1300  
 ctctccaca catcggatc cccaagcca gacaacctgc gtcgcttgc 1350  
 cctggaacac gaggcctcgg acttggtgga gatctacctc tggaagctgg 1400  
 taaaagatga ggaaactgag gctcagagag gtgaagtacc tggcccaagg 1450  
 ccacacagcc agaattcttc acttgactca gatcaagaaa gtcaggaagc 1500  
 aagactcca gaaagaggca cagcacttc gactgctgc tggccccac 1550  
 gaaggctact ggaacgtctt ctagcccag accctggagc tgaaggcac 1600  
 ggccagtcca gacaaagtga ccaagacata acaaagacct aacagttgca 1650  
 gatatgagct gtataattgt tggtattata tattaataaa taagaagttg 1700  
 cattaccctc aaaaaaaaaa aaaaaaaaaa aa 1732

<210> 82  
 <211> 451  
 <212> PRT  
 <213> Homo Sapien

<400> 82  
 Met Val Pro Glu Val Arg Val Leu Ser Ser Leu Leu Gly Leu Ala  
 1 5 10 15  
 Leu Leu Trp Phe Pro Leu Asp Ser His Ala Arg Ala Arg Pro Asp  
 20 25 30  
 Met Phe Cys Leu Phe His Gly Lys Arg Tyr Ser Pro Gly Glu Ser  
 35 40 45

Sequence Listing - P3230R1C1.txt

Trp His Pro Tyr Leu Glu Pro Gln Gly Leu Met Tyr Cys Leu Arg  
50 55 60

Cys Thr Cys Ser Glu Gly Ala His Val Ser Cys Tyr Arg Leu His  
65 70 75

Cys Pro Pro Val His Cys Pro Gln Pro Val Thr Glu Pro Gln Gln  
80 85 90

Cys Cys Pro Lys Cys Val Glu Pro His Thr Pro Ser Gly Leu Arg  
95 100 105

Ala Pro Pro Lys Ser Cys Gln His Asn Gly Thr Met Tyr Gln His  
110 115 120

Gly Glu Ile Phe Ser Ala His Glu Leu Phe Pro Ser Arg Leu Pro  
125 130 135

Asn Gln Cys Val Leu Cys Ser Cys Thr Glu Gly Gln Ile Tyr Cys  
140 145 150

Gly Leu Thr Thr Cys Pro Glu Pro Gly Cys Pro Ala Pro Leu Pro  
155 160 165

Leu Pro Asp Ser Cys Cys Gln Ala Cys Lys Asp Glu Ala Ser Glu  
170 175 180

Gln Ser Asp Glu Glu Asp Ser Val Gln Ser Leu His Gly Val Arg  
185 190 195

His Pro Gln Asp Pro Cys Ser Ser Asp Ala Gly Arg Lys Arg Gly  
200 205 210

Pro Gly Thr Pro Ala Pro Thr Gly Leu Ser Ala Pro Leu Ser Phe  
215 220 225

Ile Pro Arg His Phe Arg Pro Lys Gly Ala Gly Ser Thr Thr Val  
230 235 240

Lys Ile Val Leu Lys Glu Lys His Lys Lys Ala Cys Val His Gly  
245 250 255

Gly Lys Thr Tyr Ser His Gly Glu Val Trp His Pro Ala Phe Arg  
260 265 270

Ala Phe Gly Pro Leu Pro Cys Ile Leu Cys Thr Cys Glu Asp Gly  
275 280 285

Arg Gln Asp Cys Gln Arg Val Thr Cys Pro Thr Glu Tyr Pro Cys  
290 295 300

Arg His Pro Glu Lys Val Ala Gly Lys Cys Cys Lys Ile Cys Pro  
305 310 315

Glu Asp Lys Ala Asp Pro Gly His Ser Glu Ile Ser Ser Thr Arg

Sequence Listing - P3230R1C1.txt

320	325	330
Cys Pro Lys Ala Pro Gly Arg Val Leu Val His Thr Ser Val Ser		
335	340	345
Pro Ser Pro Asp Asn Leu Arg Arg Phe Ala Leu Glu His Glu Ala		
350	355	360
Ser Asp Leu Val Glu Ile Tyr Leu Trp Lys Leu Val Lys Asp Glu		
365	370	375
Glu Thr Glu Ala Gln Arg Gly Glu Val Pro Gly Pro Arg Pro His		
380	385	390
Ser Gln Asn Leu Pro Leu Asp Ser Asp Gln Glu Ser Gln Glu Ala		
395	400	405
Arg Leu Pro Glu Arg Gly Thr Ala Leu Pro Thr Ala Arg Trp Pro		
410	415	420
Pro Arg Arg Ser Leu Glu Arg Leu Pro Ser Pro Asp Pro Gly Ala		
425	430	435
Glu Gly His Gly Gln Ser Arg Gln Ser Asp Gln Asp Ile Thr Lys		
440	445	450

Thr

<210> 83

<211> 2052

<212> DNA

<213> Homo Sapien

<400> 83

gacagctgtg tctcgatgga gtagactctc agaacagcgc agtttgcctt 50

ccgctcacgc agagcctctc cgtggcttcc gcaccttgag cattaggcca 100

gttctctctt tctctctaatt ccatccgtca cctctctctgt catccgtttc 150

catgccgtga ggtccattca cagaacacat ccatggctct catgctcagt 200

ttggttctga gtctctctcaa gctgggatca gggcagtggc aggtgtttgg 250

gccagacaag cctgtccagg ccttggtggg ggaggacgca gcattctcct 300

gtttctgtgc tcctaagacc aatgcagagg ccatggaagt gcggttcttc 350

aggggccagt tctctagcgt ggtccacctc tacagggacg ggaaggacca 400

gccatttatg cagatgccac agtatcaagg caggacaaaa ctggtgaagg 450

attctattgc ggagggggcgc atctctctga ggctggaaaa cattactgtg 500

Sequence Listing - P3230R1C1.txt

ttggatgctg gcctctatgg gtgcaggatt agttcccagt cttactacca 550  
gaaggccatc tgggagctac aggtgtcagc actgggctca gttcctctca 600  
tttccatcac gggatatgtt gatagagaca tccagctact ctgtcagtcc 650  
tcgggctggt tccccggcc cacagcgaag tggaaaggct cacaaggaca 700  
ggatttgctc acagactcca ggacaaacag agacatgcat ggctgtttg 750  
atgtggagat ctctctgacc gtccaagaga acgccgggag catatcctgt 800  
tccatgcggc atgctcatct gagccgagag gtggaatcca gggtagagat 850  
aggagatacc ttttcgagc ctatatcgtg gcacctggct accaaagtac 900  
tgggaatact ctgctgtggc ctatttttg gcattgttgg actgaagatt 950  
ttcttctcca aattccagt gaaaaaccag gcggaactgg actggagaag 1000  
aaagcacgga caggcagaat tgagagacgc ccggaacac gcagtggagg 1050  
tgactctgga tccagagacg gctcaccga agctctgctt ttctgatctg 1100  
aaaactgtaa cccatagaaa agctccccag gaggtgcctc actctgagaa 1150  
gagatttaca aggaagagtg tggtggttc tcagagtffc caagcaggga 1200  
aacattactg ggaggtggac ggaggacaca ataaaagggtg gcgcgtggga 1250  
gtgtgccggg atgatgtgga caggaggaag gagtacgtga cttgtctcc 1300  
cgatcatggg tactgggtcc tcagactgaa tggagaacat ttgtatttca 1350  
cattaaatcc ccgtttatc agcgtcttc ccaggacccc acctacaaaa 1400  
ataggggtct tcctggacta tgagtgtggg accatctcct tctcaacat 1450  
aatgaccag tccttattt ataccctgac atgtcgggtt gaaggcttat 1500  
tgaggcccta cattgagtat ccgtctata atgagcaaaa tggaactccc 1550  
atagtcatct gccagtcac ccaggaatca gagaaagagg cctcttgga 1600  
aagggcctct gcaatcccag agacaagcaa cagtgagtcc tcctcacagg 1650  
caaccacgcc ctctctccc aggggtgaaa tgtaggatga atcacatccc 1700  
acattcttct ttagggatat taaggctct ctccagatc caaagtccc 1750  
cagcagccgg ccaagggtggc ttccagatga agggggactg gcctgtccac 1800  
atgggagtca ggtgtcatgg ctgccctgag ctgggaggga agaaggctga 1850  
cattacattt agtttgctct cactccatct ggctaagtga tcttgaata 1900

Sequence Listing - P3230R1C1.txt

ccacctctca ggtgaagaac cgtcaggaat tcccatctca caggctgtgg 1950

tgtagattaa gtagacaagg aatgtgaata atgcttagat cttattgatg 2000

acagagtgtg tcctaattgt ttgttcatta tattacactt tcagtaaaaa 2050

aa 2052

<210> 84

<211> 500

<212> PRT

<213> Homo Sapien

<400> 84

Met Ala Leu Met Leu Ser Leu Val Leu Ser Leu Leu Lys Leu Gly  
1 5 10 15

Ser Gly Gln Trp Gln Val Phe Gly Pro Asp Lys Pro Val Gln Ala  
20 25 30

Leu Val Gly Glu Asp Ala Ala Phe Ser Cys Phe Leu Ser Pro Lys  
35 40 45

Thr Asn Ala Glu Ala Met Glu Val Arg Phe Phe Arg Gly Gln Phe  
50 55 60

Ser Ser Val Val His Leu Tyr Arg Asp Gly Lys Asp Gln Pro Phe  
65 70 75

Met Gln Met Pro Gln Tyr Gln Gly Arg Thr Lys Leu Val Lys Asp  
80 85 90

Ser Ile Ala Glu Gly Arg Ile Ser Leu Arg Leu Glu Asn Ile Thr  
95 100 105

Val Leu Asp Ala Gly Leu Tyr Gly Cys Arg Ile Ser Ser Gln Ser  
110 115 120

Tyr Tyr Gln Lys Ala Ile Trp Glu Leu Gln Val Ser Ala Leu Gly  
125 130 135

Ser Val Pro Leu Ile Ser Ile Thr Gly Tyr Val Asp Arg Asp Ile  
140 145 150

Gln Leu Leu Cys Gln Ser Ser Gly Trp Phe Pro Arg Pro Thr Ala  
155 160 165

Lys Trp Lys Gly Pro Gln Gly Gln Asp Leu Ser Thr Asp Ser Arg  
170 175 180

Thr Asn Arg Asp Met His Gly Leu Phe Asp Val Glu Ile Ser Leu  
185 190 195

Thr Val Gln Glu Asn Ala Gly Ser Ile Ser Cys Ser Met Arg His  
200 205 210

Sequence Listing - P3230R1C1.txt

Ala His Leu Ser Arg Glu Val Glu Ser Arg Val Gln Ile Gly Asp	215	220	225
Thr Phe Phe Glu Pro Ile Ser Trp His Leu Ala Thr Lys Val Leu	230	235	240
Gly Ile Leu Cys Cys Gly Leu Phe Phe Gly Ile Val Gly Leu Lys	245	250	255
Ile Phe Phe Ser Lys Phe Gln Trp Lys Ile Gln Ala Glu Leu Asp	260	265	270
Trp Arg Arg Lys His Gly Gln Ala Glu Leu Arg Asp Ala Arg Lys	275	280	285
His Ala Val Glu Val Thr Leu Asp Pro Glu Thr Ala His Pro Lys	290	295	300
Leu Cys Val Ser Asp Leu Lys Thr Val Thr His Arg Lys Ala Pro	305	310	315
Gln Glu Val Pro His Ser Glu Lys Arg Phe Thr Arg Lys Ser Val	320	325	330
Val Ala Ser Gln Ser Phe Gln Ala Gly Lys His Tyr Trp Glu Val	335	340	345
Asp Gly Gly His Asn Lys Arg Trp Arg Val Gly Val Cys Arg Asp	350	355	360
Asp Val Asp Arg Arg Lys Glu Tyr Val Thr Leu Ser Pro Asp His	365	370	375
Gly Tyr Trp Val Leu Arg Leu Asn Gly Glu His Leu Tyr Phe Thr	380	385	390
Leu Asn Pro Arg Phe Ile Ser Val Phe Pro Arg Thr Pro Pro Thr	395	400	405
Lys Ile Gly Val Phe Leu Asp Tyr Glu Cys Gly Thr Ile Ser Phe	410	415	420
Phe Asn Ile Asn Asp Gln Ser Leu Ile Tyr Thr Leu Thr Cys Arg	425	430	435
Phe Glu Gly Leu Leu Arg Pro Tyr Ile Glu Tyr Pro Ser Tyr Asn	440	445	450
Glu Gln Asn Gly Thr Pro Ile Val Ile Cys Pro Val Thr Gln Glu	455	460	465
Ser Glu Lys Glu Ala Ser Trp Gln Arg Ala Ser Ala Ile Pro Glu	470	475	480



Sequence Listing - P3230R1C1.txt

Thr Ser Asn Ser Glu Ser Ser Ser Gln Ala Thr Thr Pro Phe Leu  
485 490 495

Pro Arg Gly Glu Met  
500

<210> 85

<211> 1665

<212> DNA

<213> Homo Sapien

<400> 85

aacagacgtt ccctcgcggc cctggcacct ctaacccag acatgctgct 50  
gctgctgctg ccctgctct gggggaggga gagggcggaa ggacagacaa 100  
gtaaactgct gacgatgcag agttccgtga cgggtcagga aggcctgtgt 150  
gtccatgtgc cctgctcctt ctctacccc tcgcatggct ggatttacc 200  
tggcccagta gttcatggct actggttccg ggaaggggcc aatacagacc 250  
aggatgctcc agtggccaca aacaaccag ctcgggcagt gtgggaggag 300  
actcgggacc gattccacct ccttggggac ccacatacca agaattgcac 350  
cctgagcatc agagatgcca gaagaagtga tgcggggaga tacttcttc 400  
gtatggagaa aggaagtata aaatggaatt ataaacatca ccggctctct 450  
gtgaatgtga cagccttgac ccacaggccc aacatcctca tcccaggcac 500  
cctggagtcc ggctgcccc agaatctgac ctgctctgtg ccctgggcct 550  
gtgagcaggg gacacccct atgatctct ggataggac ctccgtgtcc 600  
ccctggacc cctccaccac ccgctctcg gtgctcacc tcatccaca 650  
gccccaggac catggcaca gctcacctg tcaggtgacc ttcctgggg 700  
ccagcgtgac cacgaacaag accgtccatc tcaacgtgtc ctaccgcct 750  
cagaacttga ccatgactgt ctccaagga gacggcacag tatccacagt 800  
cttgggaaat ggctcatctc tgtactccc agagggccag tctctgcgc 850  
tggctgtgc agttgatgca gttgacagca atccccctgc caggctgagc 900  
ctgagctgga gaggcctgac cctgtgccc tcacagccct caaacccggg 950  
ggtgctggag ctgccttggg tgcacctgag ggatgcagct gaattcacct 1000  
gcagagctca gaaccctctc ggctctcagc aggtctacct gaacgtctcc 1050  
ctgcagagca aagccacatc aggagtgact caggggggtgg tcgggggagc 1100

Sequence Listing - P3230R1C1.txt

tggagccaca gccctggtct tcctgtcctt ctgcgtcatc ttcgtttag 1150  
 tgaggctctg caggaagaaa tcggcaaggc cagcagcggg cgtgggagat 1200  
 acgggcatag aggatgcaaa cgctgtcagg gggttcagcct ctcagggggc 1250  
 cctgactgaa ccttgggcag aagacagtcc cccagaccag cctccccag 1300  
 cttctgcccg ctctcagtg ggggaaggag agtccagta tgcattcctc 1350  
 agcttcaga tgggaagcc ttgggactcg cggggacagg aggccactga 1400  
 caccgagtac tcggagatca agatccacag atgagaaact gcagagactc 1450  
 accctgattg agggatcaca gccctccag gcaagggaga agtcagaggc 1500  
 tgattcttgt agaattaaca gccctcaacg tgatgagcta tgataacact 1550  
 atgaattatg tgcagagtga aaagcacaca ggcttagag tcaaagtatc 1600  
 taaacctga atccacactg tgccctcctt tttattttt taactaaaag 1650  
 acagacaaat tccta 1665

<210> 86  
 <211> 463  
 <212> PRT  
 <213> Homo Sapien

<400> 86  
 Met Leu Leu Leu Leu Leu Pro Leu Leu Trp Gly Arg Glu Arg Ala  
 1 5 10 15  
 Glu Gly Gln Thr Ser Lys Leu Leu Thr Met Gln Ser Ser Val Thr  
 20 25 30  
 Val Gln Glu Gly Leu Cys Val His Val Pro Cys Ser Phe Ser Tyr  
 35 40 45  
 Pro Ser His Gly Trp Ile Tyr Pro Gly Pro Val Val His Gly Tyr  
 50 55 60  
 Trp Phe Arg Glu Gly Ala Asn Thr Asp Gln Asp Ala Pro Val Ala  
 65 70 75  
 Thr Asn Asn Pro Ala Arg Ala Val Trp Glu Glu Thr Arg Asp Arg  
 80 85 90  
 Phe His Leu Leu Gly Asp Pro His Thr Lys Asn Cys Thr Leu Ser  
 95 100 105  
 Ile Arg Asp Ala Arg Arg Ser Asp Ala Gly Arg Tyr Phe Phe Arg  
 110 115 120  
 Met Glu Lys Gly Ser Ile Lys Trp Asn Tyr Lys His His Arg Leu

Sequence Listing - P3230R1C1.txt

125	130	135
Ser Val Asn Val Thr Ala Leu Thr His Arg Pro Asn Ile Leu Ile		
140	145	150
Pro Gly Thr Leu Glu Ser Gly Cys Pro Gln Asn Leu Thr Cys Ser		
155	160	165
Val Pro Trp Ala Cys Glu Gln Gly Thr Pro Pro Met Ile Ser Trp		
170	175	180
Ile Gly Thr Ser Val Ser Pro Leu Asp Pro Ser Thr Thr Arg Ser		
185	190	195
Ser Val Leu Thr Leu Ile Pro Gln Pro Gln Asp His Gly Thr Ser		
200	205	210
Leu Thr Cys Gln Val Thr Phe Pro Gly Ala Ser Val Thr Thr Asn		
215	220	225
Lys Thr Val His Leu Asn Val Ser Tyr Pro Pro Gln Asn Leu Thr		
230	235	240
Met Thr Val Phe Gln Gly Asp Gly Thr Val Ser Thr Val Leu Gly		
245	250	255
Asn Gly Ser Ser Leu Ser Leu Pro Glu Gly Gln Ser Leu Arg Leu		
260	265	270
Val Cys Ala Val Asp Ala Val Asp Ser Asn Pro Pro Ala Arg Leu		
275	280	285
Ser Leu Ser Trp Arg Gly Leu Thr Leu Cys Pro Ser Gln Pro Ser		
290	295	300
Asn Pro Gly Val Leu Glu Leu Pro Trp Val His Leu Arg Asp Ala		
305	310	315
Ala Glu Phe Thr Cys Arg Ala Gln Asn Pro Leu Gly Ser Gln Gln		
320	325	330
Val Tyr Leu Asn Val Ser Leu Gln Ser Lys Ala Thr Ser Gly Val		
335	340	345
Thr Gln Gly Val Val Gly Gly Ala Gly Ala Thr Ala Leu Val Phe		
350	355	360
Leu Ser Phe Cys Val Ile Phe Val Val Val Arg Ser Cys Arg Lys		
365	370	375
Lys Ser Ala Arg Pro Ala Ala Gly Val Gly Asp Thr Gly Ile Glu		
380	385	390
Asp Ala Asn Ala Val Arg Gly Ser Ala Ser Gln Gly Pro Leu Thr		
395	400	405

Sequence Listing - P3230R1C1.txt

Glu Pro Trp Ala Glu Asp Ser Pro Pro Asp Gln Pro Pro Pro Ala  
410 415 420

Ser Ala Arg Ser Ser Val Gly Glu Gly Glu Leu Gln Tyr Ala Ser  
425 430 435

Leu Ser Phe Gln Met Val Lys Pro Trp Asp Ser Arg Gly Gln Glu  
440 445 450

Ala Thr Asp Thr Glu Tyr Ser Glu Ile Lys Ile His Arg  
455 460

<210> 87

<211> 1176

<212> DNA

<213> Homo Sapien

<400> 87

agaaagctgc actctgttga gctccagggc gcagtggagg gagggagtga 50  
aggagctctc tgtaccaag gaaagtgcag ctgagactca gacaagatta 100  
caatgaacca actcagcttc ctgctgtttc tcatagcgac caccagagga 150  
tggagtacag atgaggctaa tacttacttc aaggaatgga cctgttcttc 200  
gtctccatct ctgccagaa gctgcaagga aatcaaagac gaatgtccta 250  
gtgcatttga tggcctgtat tttctccga ctgagaatgg tgttatctac 300  
cagacctct gtgacatgac ctctgggggt ggcggtgga ccctgggtggc 350  
cagcgtgcat gagaatgaca tgcgtgggaa gtgcacggtg ggcgatcgct 400  
ggtcagtcg gcagggcagc aaagcagact acccagaggg ggacggcaac 450  
tgggccaact acaacacctt tggatctgca gaggcggcca cgagcgatga 500  
ctacaagaac cctggctact acgacatcca ggccaaggac ctgggcatct 550  
ggcacgtgcc caataagtcc cccatgcagc actggagaaa cagctccctg 600  
ctgaggtacc gcacggacac tggcttctc cagacactgg gacataatct 650  
gtttggcatc taccagaaat atccagtga atatggagaa ggaaagtgtt 700  
ggactgacaa cgccccgtg atccctgtg tctatgattt tggcgacgcc 750  
cagaaaacag catcttatta ctaccctat ggccagcggg aattcactgc 800  
gggatttgtt cagttcaggg tatttaataa cgagagagca gccaacgcct 850  
tgtgtgctgg aatgaggggtc accggatgta acactgagca tctactgcatt 900

Sequence Listing - P3230R1C1.txt

ggtggaggag gatactttcc agaggccagt cccagcagt gtggagattt 950  
 ttctggtttt gattggagtg gatatggaac tcatgttggg tacagcagca 1000  
 gccgtgagat aactgaggca gctgtgcttc tattctatcg ttgagagttt 1050  
 tgtgggaggg aaccagacc tctcctcca accatgagat cccaaggatg 1100  
 gagaacaact taccagtag ctagaatgtt aatggcagaa gagaaaacaa 1150  
 taaatcatat tgactcaaga aaaaaa 1176

<210> 88

<211> 313

<212> PRT

<213> Homo Sapien

<400> 88

Met Asn Gln Leu Ser Phe Leu Leu Phe Leu Ile Ala Thr Thr Arg  
 1 5 10 15

Gly Trp Ser Thr Asp Glu Ala Asn Thr Tyr Phe Lys Glu Trp Thr  
 20 25 30

Cys Ser Ser Ser Pro Ser Leu Pro Arg Ser Cys Lys Glu Ile Lys  
 35 40 45

Asp Glu Cys Pro Ser Ala Phe Asp Gly Leu Tyr Phe Leu Arg Thr  
 50 55 60

Glu Asn Gly Val Ile Tyr Gln Thr Phe Cys Asp Met Thr Ser Gly  
 65 70 75

Gly Gly Gly Trp Thr Leu Val Ala Ser Val His Glu Asn Asp Met  
 80 85 90

Arg Gly Lys Cys Thr Val Gly Asp Arg Trp Ser Ser Gln Gln Gly  
 95 100 105

Ser Lys Ala Asp Tyr Pro Glu Gly Asp Gly Asn Trp Ala Asn Tyr  
 110 115 120

Asn Thr Phe Gly Ser Ala Glu Ala Ala Thr Ser Asp Asp Tyr Lys  
 125 130 135

Asn Pro Gly Tyr Tyr Asp Ile Gln Ala Lys Asp Leu Gly Ile Trp  
 140 145 150

His Val Pro Asn Lys Ser Pro Met Gln His Trp Arg Asn Ser Ser  
 155 160 165

Leu Leu Arg Tyr Arg Thr Asp Thr Gly Phe Leu Gln Thr Leu Gly  
 170 175 180

His Asn Leu Phe Gly Ile Tyr Gln Lys Tyr Pro Val Lys Tyr Gly

Sequence Listing - P3230R1C1.txt

185	190	195
Glu Gly Lys Cys Trp Thr	Asp Asn Gly	Pro Val Ile Pro Val Val
200	205	210
Tyr Asp Phe Gly Asp Ala Gln	Lys Thr Ala Ser Tyr Tyr Ser Pro	
215	220	225
Tyr Gly Gln Arg Glu Phe Thr	Ala Gly Phe Val Gln Phe Arg Val	
230	235	240
Phe Asn Asn Glu Arg Ala Ala	Asn Ala Leu Cys Ala Gly Met Arg	
245	250	255
Val Thr Gly Cys Asn Thr Glu	His His Cys Ile Gly Gly Gly Gly	
260	265	270
Tyr Phe Pro Glu Ala Ser Pro	Gln Gln Cys Gly Asp Phe Ser Gly	
275	280	285
Phe Asp Trp Ser Gly Tyr Gly	Thr His Val Gly Tyr Ser Ser Ser	
290	295	300
Arg Glu Ile Thr Glu Ala Ala	Val Leu Leu Phe Tyr Arg	
305	310	

<210> 89

<211> 759

<212> DNA

<213> Homo Sapien

<400> 89

ctagatttgt cggcttgccg ggagacttca ggagtcgctg tctctgaact 50

tccagcctca gagaccgccg ccttggtccc cgagggccat gggccgggtc 100

tcagggttg tgccctctcg cttctgacg ctctggcgc atctggtggt 150

cgatcatcacc ttattctggt cccgggacag caacatacag gcctgcctgc 200

ctctcacgtt caccctcgag gagtatgaca agcaggacat tcagctggtg 250

gccgcgctct ctgtaccct gggcctctt gcagtggagc tggccggtt 300

ccttcagga gtctcatgt tcaacagcac ccagagcctc atctccattg 350

gggtcactg tagtgcaccc gtggccctgt ccttctcat attcgagcgt 400

tgggagtgc ctacgtattg gtacattttt gtctctgca gtgcccttc 450

agctgtcact gaaatggctt tattcgtcac cgtctttggg ctgaaaaaga 500

aacccttctg attaccttca tgacgggaac ctaaggacga agcctacagg 550

ggcaagggcc gcttcgtatt cctggaagaa ggaaggcata ggcttcggtt 600

Sequence Listing - P3230R1C1.txt

ttccctcgg aaactgcttc tgctggagga tatgtgttg aataattacg 650

tcttgagtct gggattatcc gcattgtatt tagtgctttg taataaaata 700

tgttttgtag taacattaag acttatatac agttttaggg gacaattaa 750

aaaaaaaa 759

<210> 90

<211> 140

<212> PRT

<213> Homo Sapien

<400> 90

Met Gly Arg Val Ser Gly Leu Val Pro Ser Arg Phe Leu Thr Leu  
1 5 10 15

Leu Ala His Leu Val Val Val Ile Thr Leu Phe Trp Ser Arg Asp  
20 25 30

Ser Asn Ile Gln Ala Cys Leu Pro Leu Thr Phe Thr Pro Glu Glu  
35 40 45

Tyr Asp Lys Gln Asp Ile Gln Leu Val Ala Ala Leu Ser Val Thr  
50 55 60

Leu Gly Leu Phe Ala Val Glu Leu Ala Gly Phe Leu Ser Gly Val  
65 70 75

Ser Met Phe Asn Ser Thr Gln Ser Leu Ile Ser Ile Gly Ala His  
80 85 90

Cys Ser Ala Ser Val Ala Leu Ser Phe Phe Ile Phe Glu Arg Trp  
95 100 105

Glu Cys Thr Thr Tyr Trp Tyr Ile Phe Val Phe Cys Ser Ala Leu  
110 115 120

Pro Ala Val Thr Glu Met Ala Leu Phe Val Thr Val Phe Gly Leu  
125 130 135

Lys Lys Lys Pro Phe  
140

<210> 91

<211> 1871

<212> DNA

<213> Homo Sapien

<400> 91

ctgggacccc gaaaagagaa ggggagagcg aggggacgag agcggaggag 50

gaagatgcaa ctgactcgct gctgcttcgt gttctggtg cagggtagcc 100

Sequence Listing - P3230R1C1.txt

tctatctggt catctgtggc caggatgatg gtcctcccgg ctacagaggac 150  
cctgagcgtg atgaccacga gggccagccc cggccccggg tgcctcggaa 200  
gcggggccac atctcaccta agtcccggcc catggccaat tccactctcc 250  
tagggctgct ggccccgcct ggggaggctt ggggcattct tgggcagccc 300  
cccaaccgcc cgaaccacag cccccaccc tcagccaagg tgaagaaaat 350  
ctttggctgg ggcgacttct actccaacat caagacgggtg gccctgaacc 400  
tgctcgtcac agggaagatt gtggaccatg gcaatgggac cttcagcgtc 450  
cacttccaac acaatgccac aggccaggga aacatctcca tcagcctcgt 500  
gccccccagt aaagctgtag agttccacca ggaacagcag atcttcatcg 550  
aagccaaggc ctcaaaaatc ttcaactgcc ggatggagtg ggagaaggta 600  
gaacggggcc gccggacctc gctttgcacc cacgaccag ccaagatctg 650  
ctcccgagac cacgctcaga gctcagccac ctggagctgc tcccagccct 700  
tcaaagtcgt ctgtgtctac atgccttct acagcacgga ctatcggtg 750  
gtccagaagg tgtgccaga ttacaactac catagtata cccctacta 800  
cccatctggg tgaccggggg caggccacag aggccaggcc agggctggaa 850  
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gccagggcca agtctcaagt ggagagaaa ggggtccaag tgctggtccc 1000  
aacctgaagc tgtggagtga ctagatcaca ggagcactgg aggaggagt 1050  
ggctctctgt gcagcctcac agggctttgc cacggagcca cagagagatg 1100  
ctgggtcccc gaggcctgtg ggcaggccga tcagtgtggc ccagatcaa 1150  
gtcatgggag gaagctaagc ccttggttct tgccatctg aggaaagata 1200  
gcaacaggga gggggagatt tcatcagtgt ggacagcctg tcaacttagg 1250  
atggatggct gagagggtt ctaggagcc agtcagcagg gtgggggtggg 1300  
gccagaggag ctctccagcc ctgcctagt ggcgcctga gcccttctc 1350  
gtgtgctgag catggcatga ggtgaagt gcaaccctgg ggtctttgat 1400  
gtcttgacag attgaccatc tgtctccagc caggccaccc ctttcaaaa 1450  
ttccctcttc tgccagtact cccctgtac caccattgc tgatggcaca 1500



Sequence Listing - P3230R1C1.txt

cccatcctta agctaagaca ggacgattgt ggtcctccca cactaaggcc 1550  
 acagcccatc cgcgtgctgt gtgtccctct tccaccccaa ccctgctgg 1600  
 ctctctggg agcatccatg tcccgagag gggtcctca acagtcagcc 1650  
 tcacctgtca gaccggggtt ctcccgatc tggatggcgc cgcctctca 1700  
 gcagcgggca cgggtggggc ggggccgggc cgcagagcat gtgctggatc 1750  
 tgttctgtgt gtctgtctgt ggggtggggg aggggagggg agtcttgtga 1800  
 aaccgtgat tgctgacttt tgtgtgaaga atcgtgttct tggagcagga 1850  
 aataagctt gccccggggc a 1871

<210> 92

<211> 252

<212> PRT

<213> Homo Sapien

<400> 92

Met Gln Leu Thr Arg Cys Cys Phe Val Phe Leu Val Gln Gly Ser  
 1 5 10 15

Leu Tyr Leu Val Ile Cys Gly Gln Asp Asp Gly Pro Pro Gly Ser  
 20 25 30

Glu Asp Pro Glu Arg Asp Asp His Glu Gly Gln Pro Arg Pro Arg  
 35 40 45

Val Pro Arg Lys Arg Gly His Ile Ser Pro Lys Ser Arg Pro Met  
 50 55 60

Ala Asn Ser Thr Leu Leu Gly Leu Leu Ala Pro Pro Gly Glu Ala  
 65 70 75

Trp Gly Ile Leu Gly Gln Pro Pro Asn Arg Pro Asn His Ser Pro  
 80 85 90

Pro Pro Ser Ala Lys Val Lys Lys Ile Phe Gly Trp Gly Asp Phe  
 95 100 105

Tyr Ser Asn Ile Lys Thr Val Ala Leu Asn Leu Leu Val Thr Gly  
 110 115 120

Lys Ile Val Asp His Gly Asn Gly Thr Phe Ser Val His Phe Gln  
 125 130 135

His Asn Ala Thr Gly Gln Gly Asn Ile Ser Ile Ser Leu Val Pro  
 140 145 150

Pro Ser Lys Ala Val Glu Phe His Gln Glu Gln Gln Ile Phe Ile  
 155 160 165

Glu Ala Lys Ala Ser Lys Ile Phe Asn Cys Arg Met Glu Trp Glu

Sequence Listing - P3230R1C1.txt

170	175	180
Lys Val Glu Arg Gly Arg Arg Thr Ser Leu Cys Thr His Asp Pro		
185	190	195
Ala Lys Ile Cys Ser Arg Asp His Ala Gln Ser Ser Ala Thr Trp		
200	205	210
Ser Cys Ser Gln Pro Phe Lys Val Val Cys Val Tyr Ile Ala Phe		
215	220	225
Tyr Ser Thr Asp Tyr Arg Leu Val Gln Lys Val Cys Pro Asp Tyr		
230	235	240
Asn Tyr His Ser Asp Thr Pro Tyr Tyr Pro Ser Gly		
245	250	

<210> 93  
 <211> 902  
 <212> DNA  
 <213> Homo Sapien

<400> 93  
 cgggtggccat gactgcggcc gtgttcttcg gctgcgcctt cattgccttc 50  
 gggcctgcgc tcgcccttta tgtcttcacc atcgccatcg agccgttgcg 100  
 tatcatcttc ctcatcgccg gagctttctt ctggttggtg tctctactga 150  
 tttcgtccct tgtttggttc atggcaagag tcattattga caacaaagat 200  
 ggaccaacac agaaatatct gctgatcttt ggagcgtttg tctctgtcta 250  
 tatccaagaa atgttccgat ttgcatatta taaactctta aaaaaagcca 300  
 gtgaagggtt gaagagtata aaccagggtg agacagcacc ctctatgcga 350  
 ctgctggcct atgtttctgg cttgggcttt ggaatcatga gtggagtatt 400  
 ttcttttggt aataccctat ctgactcctt gggggcaggc acagtgggca 450  
 ttcatggaga ttctcctcaa ttcttccttt attcagcttt catgacgctg 500  
 gtcattatct tgctgcatgt attctggggc attgtatttt ttgatggctg 550  
 tgagaagaaa aagtggggca tcctccttat cgttctcctg acccacctgc 600  
 tgggtgcagc ccagaccttc ataagttctt attatggaat aaacctggcg 650  
 tcagcattta taatcctggt gctcatgggc acctgggcat tcttagctgc 700  
 gggaggcagc tgccgaagcc tgaaactctg cctgctctgc caagacaaga 750  
 actttcttct ttacaaccag cgctccagat aacctcaggg aaccagcact 800

Sequence Listing - P3230R1C1.txt

tcccaaaccg cagactacat cttagagga agcacaactg tgccttttc 850

tgaaaatccc ttttctggt ggaattgaga aagaaataaa actatgcaga 900

ta 902

<210> 94

<211> 257

<212> PRT

<213> Homo Sapien

<400> 94

Met Thr Ala Ala Val Phe Phe Gly Cys Ala Phe Ile Ala Phe Gly

1 5 10 15

Pro Ala Leu Ala Leu Tyr Val Phe Thr Ile Ala Ile Glu Pro Leu

20 25 30

Arg Ile Ile Phe Leu Ile Ala Gly Ala Phe Phe Trp Leu Val Ser

35 40 45

Leu Leu Ile Ser Ser Leu Val Trp Phe Met Ala Arg Val Ile Ile

50 55 60

Asp Asn Lys Asp Gly Pro Thr Gln Lys Tyr Leu Leu Ile Phe Gly

65 70 75

Ala Phe Val Ser Val Tyr Ile Gln Glu Met Phe Arg Phe Ala Tyr

80 85 90

Tyr Lys Leu Leu Lys Lys Ala Ser Glu Gly Leu Lys Ser Ile Asn

95 100 105

Pro Gly Glu Thr Ala Pro Ser Met Arg Leu Leu Ala Tyr Val Ser

110 115 120

Gly Leu Gly Phe Gly Ile Met Ser Gly Val Phe Ser Phe Val Asn

125 130 135

Thr Leu Ser Asp Ser Leu Gly Pro Gly Thr Val Gly Ile His Gly

140 145 150

Asp Ser Pro Gln Phe Phe Leu Tyr Ser Ala Phe Met Thr Leu Val

155 160 165

Ile Ile Leu Leu His Val Phe Trp Gly Ile Val Phe Phe Asp Gly

170 175 180

Cys Glu Lys Lys Lys Trp Gly Ile Leu Leu Ile Val Leu Leu Thr

185 190 195

His Leu Leu Val Ser Ala Gln Thr Phe Ile Ser Ser Tyr Tyr Gly

200 205 210

Ile Asn Leu Ala Ser Ala Phe Ile Ile Leu Val Leu Met Gly Thr

Sequence Listing - P3230R1C1.txt

215 220 225

Trp Ala Phe Leu Ala Ala Gly Gly Ser Cys Arg Ser Leu Lys Leu  
230 235 240

Cys Leu Leu Cys Gln Asp Lys Asn Phe Leu Leu Tyr Asn Gln Arg  
245 250 255

Ser Arg

<210> 95

<211> 1073

<212> DNA

<213> Homo Sapien

<400> 95

aatttttcac cagagtaaacc ttgagaaacc aactggacct tgagtattgt 50

acattttgcc tcgtggaccc aaaggtagca atctgaaaca tgaggagtac 100

gattctactg tttgtcttc taggatcaac tcggtcatta ccacagctca 150

aaactgcttt gggactccct cccacaaaac tggctccgga tcaggggaaca 200

ctaccaaacc aacagcagtc aaatcaggtc tttccttctt taagtctgat 250

accattaaca cagatgctca cactggggcc agatctgcat ctgttaaadc 300

ctgctgcagg aatgacacct ggtaccaga cccaccatt gacctggga 350

gggttgaatg tacaacagca actgcacca catgtgttac caattttgt 400

cacacaactt ggagcccagg gcactatcct aagctcagag gaattgccac 450

aaatcttcac gagcctcatc atccattcct tgttccggg aggcacctg 500

cccaccagtc aggcaggggc taatccagat gtccaggatg gaagccttc 550

agcaggagga gcaggtgtaa atcctgccac ccagggaacc ccagcaggcc 600

gcctccaac tcccagtggc acagatgacg actttgcagt gaccaccct 650

gcaggcatcc aaaggagcac acatgccatc gaggaagcca ccacagaatc 700

agcaaatgga attcagtaag ctgtttcaaa tttttcaac taagctgcct 750

cgaatttggg gatacatgtg aatctttatc attgattata ttatggaata 800

gattgagaca cattggatag tcttagaaga aattaattct taatttacct 850

gaaaatattc ttgaaatttc agaaaatatg ttctatgtag agaatcccaa 900

cttttaaaaa caataattca atggataaat ctgtctttga aatataacat 950

Sequence Listing - P3230R1C1.txt

tatgctgcct ggatgatatg catattaaaa catatttga aaactggaaa 1000

aaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 1050

aaaaaaaaa aaaaaaaaaa aaa 1073

<210> 96

<211> 209

<212> PRT

<213> Homo Sapien

<400> 96

Met Arg Ser Thr Ile Leu Leu Phe Cys Leu Leu Gly Ser Thr Arg

1 5 10 15

Ser Leu Pro Gln Leu Lys Pro Ala Leu Gly Leu Pro Pro Thr Lys

20 25 30

Leu Ala Pro Asp Gln Gly Thr Leu Pro Asn Gln Gln Gln Ser Asn

35 40 45

Gln Val Phe Pro Ser Leu Ser Leu Ile Pro Leu Thr Gln Met Leu

50 55 60

Thr Leu Gly Pro Asp Leu His Leu Leu Asn Pro Ala Ala Gly Met

65 70 75

Thr Pro Gly Thr Gln Thr His Pro Leu Thr Leu Gly Gly Leu Asn

80 85 90

Val Gln Gln Gln Leu His Pro His Val Leu Pro Ile Phe Val Thr

95 100 105

Gln Leu Gly Ala Gln Gly Thr Ile Leu Ser Ser Glu Glu Leu Pro

110 115 120

Gln Ile Phe Thr Ser Leu Ile Ile His Ser Leu Phe Pro Gly Gly

125 130 135

Ile Leu Pro Thr Ser Gln Ala Gly Ala Asn Pro Asp Val Gln Asp

140 145 150

Gly Ser Leu Pro Ala Gly Gly Ala Gly Val Asn Pro Ala Thr Gln

155 160 165

Gly Thr Pro Ala Gly Arg Leu Pro Thr Pro Ser Gly Thr Asp Asp

170 175 180

Asp Phe Ala Val Thr Thr Pro Ala Gly Ile Gln Arg Ser Thr His

185 190 195

Ala Ile Glu Glu Ala Thr Thr Glu Ser Ala Asn Gly Ile Gln

200 205

<210> 97

Sequence Listing - P3230R1C1.txt

<211> 2848

<212> DNA

<213> Homo Sapien

<400> 97

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tggagaagga gctctcttct tgcttggcag ctggaccaag ggagccagtc 100  
ttgggcgctg gagggcctgt cctgaccatg gtcctgcct ggctgtggct 150  
gctttgtgtc tccgtccccc aggtctctcc caaggcccag cctgcagagc 200  
tgtctgtgga agttccagaa aactatggtg gaaatttccc ttatacctg 250  
accaagttgc cgctgccccg tgaggggggt gaaggccaga tcgtgctgtc 300  
aggggactca ggcaaggcaa ctgagggccc atttgctatg gatccagatt 350  
ctggcttctt gctggtgacc agggccctgg accgagagga gcaggcagag 400  
taccagctac aggtcacctt ggagatgcag gatggacatg tcttgtgggg 450  
tccacagcct gtgcttgtgc acgtgaagga tgagaatgac caggtgcccc 500  
atttctctca agccatctac agagctcggc tgagccgggg taccaggcct 550  
ggcatccctt tctcttctt tgaggcttca gaccgggatg agccaggcac 600  
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cttccccaga catgttccag ctggagcctc ggctgggggc tctggccctc 700  
agccccaagg ggagcaccag ccttgaccac gccctggaga ggacctacca 750  
gctgttggtg caggtcaagg acatgggtga ccaggcctca ggccaccagg 800  
ccactgccac cgtggaagtc tccatcatag agagcacctg ggtgtcccta 850  
gagcctatcc acctggcaga gaatctcaaa gtctatacc cgcaccacat 900  
ggcccaggta cactggagtg ggggtgatgt gcactatcac ctggagagcc 950  
atccccggg accctttgaa gtgaatgcag agggaaacct ctacgtgacc 1000  
agagagctgg acagagaagc ccaggctgag tacctgctcc aggtgcgggc 1050  
tcagaattcc catggcgagg actatgcggc ccctctggag ctgcacgtgc 1100  
tggtgatgga tgagaatgac aacgtgccta tctgccctcc ccgtgacccc 1150  
acagtcagca tccctgagct cagtccacca ggtactgaag tgactagact 1200  
gtcagcagag gatgcagatg cccccggctc cccaattcc cacgttgtgt 1250

Sequence Listing - P3230R1C1.txt

atcagctcct gagccctgag cctgaggatg gggtagaggg gagagccttc 1300  
cagggtggacc ccacttcagg cagtgtgacg ctgggggtgc tcccactccg 1350  
agcaggccag aacatcctgc ttctggtgct ggccatggac ctggcaggcg 1400  
cagaggggtgg cttcagcagc acgtgtgaag tcgaagtcgc agtcacagat 1450  
atcaatgatc acgcccctga gttcatcact tcccagattg ggcctataag 1500  
cctccctgag gatgtggagc ccgggactct ggtggccatg ctaacagcca 1550  
ttgatgctga cctcgagccc gccttcgcc tcatggattt tgccattgag 1600  
aggggagaca cagaaggagc ttttggcctg gattgggagc cagactctgg 1650  
gcatgttaga ctgagactct gcaagaacct cagttatgag gcagctcaa 1700  
gtcatgaggt ggtggtggtg gtgcagagtg tggcgaagct ggtggggcca 1750  
ggcccaggcc ctggagccac cgccacggtg actgtgctag tggagagagt 1800  
gatgccaccc cccaagttgg accaggagag ctacgaggcc agtgtccca 1850  
tcagtgcctc agccggctct ttctgctga ccatccagcc ctccgacccc 1900  
atcagccgaa ccctcagggt ctccctagtc aatgactcag agggctggct 1950  
ctgcattgag aaattctccg gggaggtgca caccgcccag tcctgcagg 2000  
gcgcccagcc tggggacacc tacacggtgc ttgtggaggc ccaggataca 2050  
gccctgactc ttgccctgt gccctccaa tacctctgca caccgcca 2100  
agaccatggc ttgatcgtga gtggaccag caaggacccc gatctggcca 2150  
gtgggcacgg tcctacagc ttcacccttg gtccaaccc cagggtgcaa 2200  
cgggattggc gcctccagac tctcaatggt tccatgcct acctcacctt 2250  
ggcctgcat tgggtggagc cagtggaaca cataatcccc gtggtggtca 2300  
gccacaatgc ccagatgtgg cagctcctgg ttcgagtgat cgtgtgtcgc 2350  
tgcaacgtgg aggggcagtg catgcgcaag gtgggccgca tgaagggcat 2400  
gcccacgaag ctgtcggcag tgggcatcct ttaggcacc ctggtagcaa 2450  
taggaatctt cctcatcctc attttaccc actggaccat gtcaaggaag 2500  
aaggacccgg atcaaccagc agacagcgtg ccctgaagg cgactgtctg 2550  
aatggcccag gcagctctag ctgggagctt ggcctctggc tccatctgag 2600  
tcccctggga gagagcccag cacccaagat ccagcagggg acaggacaga 2650

Sequence Listing - P3230R1C1.txt

gtagaagccc ctccatctgc cctgggggtgg aggcaccatc accatcacca 2700

ggcatgtctg cagagcctgg acaccaactt tatggactgc ccatgggagt 2750

gctccaaatg tcagggtgtt tgcccaataa taaagcccca gagaactggg 2800

ctggggccta tgggaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaag 2848

<210> 98

<211> 807

<212> PRT

<213> Homo Sapien

<400> 98

Met Val Pro Ala Trp Leu Trp Leu Leu Cys Val Ser Val Pro Gln  
1 5 10 15

Ala Leu Pro Lys Ala Gln Pro Ala Glu Leu Ser Val Glu Val Pro  
20 25 30

Glu Asn Tyr Gly Gly Asn Phe Pro Leu Tyr Leu Thr Lys Leu Pro  
35 40 45

Leu Pro Arg Glu Gly Ala Glu Gly Gln Ile Val Leu Ser Gly Asp  
50 55 60

Ser Gly Lys Ala Thr Glu Gly Pro Phe Ala Met Asp Pro Asp Ser  
65 70 75

Gly Phe Leu Leu Val Thr Arg Ala Leu Asp Arg Glu Glu Gln Ala  
80 85 90

Glu Tyr Gln Leu Gln Val Thr Leu Glu Met Gln Asp Gly His Val  
95 100 105

Leu Trp Gly Pro Gln Pro Val Leu Val His Val Lys Asp Glu Asn  
110 115 120

Asp Gln Val Pro His Phe Ser Gln Ala Ile Tyr Arg Ala Arg Leu  
125 130 135

Ser Arg Gly Thr Arg Pro Gly Ile Pro Phe Leu Phe Leu Glu Ala  
140 145 150

Ser Asp Arg Asp Glu Pro Gly Thr Ala Asn Ser Asp Leu Arg Phe  
155 160 165

His Ile Leu Ser Gln Ala Pro Ala Gln Pro Ser Pro Asp Met Phe  
170 175 180

Gln Leu Glu Pro Arg Leu Gly Ala Leu Ala Leu Ser Pro Lys Gly  
185 190 195

Ser Thr Ser Leu Asp His Ala Leu Glu Arg Thr Tyr Gln Leu Leu



Sequence Listing - P3230R1C1.txt

200	205	210
Val Gln Val Lys Asp Met Gly Asp Gln Ala Ser Gly His Gln Ala		
215	220	225
Thr Ala Thr Val Glu Val Ser Ile Ile Glu Ser Thr Trp Val Ser		
230	235	240
Leu Glu Pro Ile His Leu Ala Glu Asn Leu Lys Val Leu Tyr Pro		
245	250	255
His His Met Ala Gln Val His Trp Ser Gly Gly Asp Val His Tyr		
260	265	270
His Leu Glu Ser His Pro Pro Gly Pro Phe Glu Val Asn Ala Glu		
275	280	285
Gly Asn Leu Tyr Val Thr Arg Glu Leu Asp Arg Glu Ala Gln Ala		
290	295	300
Glu Tyr Leu Leu Gln Val Arg Ala Gln Asn Ser His Gly Glu Asp		
305	310	315
Tyr Ala Ala Pro Leu Glu Leu His Val Leu Val Met Asp Glu Asn		
320	325	330
Asp Asn Val Pro Ile Cys Pro Pro Arg Asp Pro Thr Val Ser Ile		
335	340	345
Pro Glu Leu Ser Pro Pro Gly Thr Glu Val Thr Arg Leu Ser Ala		
350	355	360
Glu Asp Ala Asp Ala Pro Gly Ser Pro Asn Ser His Val Val Tyr		
365	370	375
Gln Leu Leu Ser Pro Glu Pro Glu Asp Gly Val Glu Gly Arg Ala		
380	385	390
Phe Gln Val Asp Pro Thr Ser Gly Ser Val Thr Leu Gly Val Leu		
395	400	405
Pro Leu Arg Ala Gly Gln Asn Ile Leu Leu Leu Val Leu Ala Met		
410	415	420
Asp Leu Ala Gly Ala Glu Gly Gly Phe Ser Ser Thr Cys Glu Val		
425	430	435
Glu Val Ala Val Thr Asp Ile Asn Asp His Ala Pro Glu Phe Ile		
440	445	450
Thr Ser Gln Ile Gly Pro Ile Ser Leu Pro Glu Asp Val Glu Pro		
455	460	465
Gly Thr Leu Val Ala Met Leu Thr Ala Ile Asp Ala Asp Leu Glu		
470	475	480

Sequence Listing - P3230R1C1.txt

Pro Ala Phe Arg Leu Met Asp Phe Ala Ile Glu Arg Gly Asp Thr  
485 490 495

Glu Gly Thr Phe Gly Leu Asp Trp Glu Pro Asp Ser Gly His Val  
500 505 510

Arg Leu Arg Leu Cys Lys Asn Leu Ser Tyr Glu Ala Ala Pro Ser  
515 520 525

His Glu Val Val Val Val Val Gln Ser Val Ala Lys Leu Val Gly  
530 535 540

Pro Gly Pro Gly Pro Gly Ala Thr Ala Thr Val Thr Val Leu Val  
545 550 555

Glu Arg Val Met Pro Pro Pro Lys Leu Asp Gln Glu Ser Tyr Glu  
560 565 570

Ala Ser Val Pro Ile Ser Ala Pro Ala Gly Ser Phe Leu Leu Thr  
575 580 585

Ile Gln Pro Ser Asp Pro Ile Ser Arg Thr Leu Arg Phe Ser Leu  
590 595 600

Val Asn Asp Ser Glu Gly Trp Leu Cys Ile Glu Lys Phe Ser Gly  
605 610 615

Glu Val His Thr Ala Gln Ser Leu Gln Gly Ala Gln Pro Gly Asp  
620 625 630

Thr Tyr Thr Val Leu Val Glu Ala Gln Asp Thr Ala Leu Thr Leu  
635 640 645

Ala Pro Val Pro Ser Gln Tyr Leu Cys Thr Pro Arg Gln Asp His  
650 655 660

Gly Leu Ile Val Ser Gly Pro Ser Lys Asp Pro Asp Leu Ala Ser  
665 670 675

Gly His Gly Pro Tyr Ser Phe Thr Leu Gly Pro Asn Pro Thr Val  
680 685 690

Gln Arg Asp Trp Arg Leu Gln Thr Leu Asn Gly Ser His Ala Tyr  
695 700 705

Leu Thr Leu Ala Leu His Trp Val Glu Pro Arg Glu His Ile Ile  
710 715 720

Pro Val Val Val Ser His Asn Ala Gln Met Trp Gln Leu Leu Val  
725 730 735

Arg Val Ile Val Cys Arg Cys Asn Val Glu Gly Gln Cys Met Arg  
740 745 750

Sequence Listing - P3230R1C1.txt

Lys Val Gly Arg Met Lys Gly Met Pro Thr Lys Leu Ser Ala Val  
755 760 765

Gly Ile Leu Val Gly Thr Leu Val Ala Ile Gly Ile Phe Leu Ile  
770 775 780

Leu Ile Phe Thr His Trp Thr Met Ser Arg Lys Lys Asp Pro Asp  
785 790 795

Gln Pro Ala Asp Ser Val Pro Leu Lys Ala Thr Val  
800 805

<210> 99

<211> 2436

<212> DNA

<213> Homo Sapien

<400> 99

ggctgaccgt gctacattgc ctggaggaag cctaaggaac ccaggcatcc 50  
agctgcccac gcctgagtcc aagattcttc ccaggaacac aaacgtagga 100  
gaccacgct cctggaagca ccagccttta tctcttcacc ttcaagtccc 150  
cttttcaag aatcctctgt tctttgccct ctaaagtctt ggtacatcta 200  
ggacccaggc atcttgcttt ccagccacaa agagacagat gaagatgcag 250  
aaaggaaatg ttctccttat gtttgggtcta ctattgcatt tagaagctgc 300  
aacaattcc aatgagacta gcacctctgc caactctgga tccagtgtga 350  
tctccagtgg agccagcaca gccaccaact ctgggtccag tgtgacctcc 400  
agtgggggtca gcacagccac catctcaggg tccagcgtga cctccaatgg 450  
ggtcagcata gtcaccaact ctgagttcca tacaacctcc agtgggatca 500  
gcacagccac caactctgag tttagcacag cgtccagtgg gatcagcata 550  
gccaccaact ctgagtccag cacaacctcc agtgggggcca gcacagccac 600  
caactctgag tccagcacac cctccagtgg ggccagcaca gtcaccaact 650  
ctgggtccag tgtgacctcc agtggagcca gactgccac caactctgag 700  
tccagcacag tgtccagttag ggccagcact gccaccaact ctgagtctag 750  
cacactctcc agtgggggcca gcacagccac caactctgac tccagcaca 800  
cctccagtgg ggctagcaca gccaccaact ctgagtccag cacaacctcc 850  
agtgggggcca gcacagccac caactctgag tccagcacag tgtccagttag 900  
ggccagcact gccaccaact ctgagtccag cacaacctcc agtgggggcca 950

Sequence Listing - P3230R1C1.txt

gcacagccac caactctgag tccagaacga cctccaatgg ggctggcaca 1000  
gccaccaact ctgagtccag cagcacctcc agtgggggcca gcacagccac 1050  
caactctgac tccagcacag tgtccagtgg ggccagcact gccaccaact 1100  
ctgagtccag cagcacctcc agtgggggcca gcacagccac caactctgag 1150  
tccagcacga cctccagtgg ggctagcaca gccaccaact ctgactccag 1200  
cacaacctcc agtgggggccg gcacagccac caactctgag tccagcacag 1250  
tgtccagtgg gatcagcaca gtcaccaatt ctgagtccag cacacctcc 1300  
agtgggggcca acacagccac caactctgag tccagtacga cctccagtgg 1350  
ggccaacaca gccaccaact ctgagtccag cacagtgtcc agtgggggcca 1400  
gcactgccac caactctgag tccagcaca cctccagtgg ggtcagcaca 1450  
gccaccaact ctgagtccag cacaacctcc agtgggggcta gcacagccac 1500  
caactctgac tccagcaca cctccagtga ggccagcaca gccaccaact 1550  
ctgagtctag cacagtgtcc agtgggatca gcacagtcac caattctgag 1600  
tccagcaca cctccagtgg ggccaacaca gccaccaact ctgggtccag 1650  
tgtgacctct gcaggctctg gaacagcagc tctgactgga atgcacaca 1700  
cttcccatag tgcatctact gcagtgagtg aggcaaagcc tgggtgggtcc 1750  
ctggtgccgt gggaaatctt cctcatcacc ctggtctcgg ttgtggcggc 1800  
cgtggggctc tttgctgggc tcttctctg tgtgagaaac agcctgtccc 1850  
tgagaaacac cttaacaca gctgtctacc accctcatgg cctcaacct 1900  
ggccttggtc caggccctgg agggaatcat ggagcccccc acaggcccag 1950  
gtggagtcct aactggttct ggaggagacc agtatcatcg atagccatgg 2000  
agatgagcgg gaggaacagc gggccctgag cagccccgga agcaagtgcc 2050  
gcattcttca ggaaggaaga gacctgggca cccaagacct ggtttccttt 2100  
cattcatccc aggagacccc tcccagcttt gtttgagatc ctgaaaatct 2150  
tgaagaaggt attcctcacc tttctgcct ttaccagaca ctggaaagag 2200  
aatactatat tgctcattta gctaagaaat aaatacatct catctaacac 2250  
acacgacaaa gagaagctgt gcttgccccg gggtggggtat ctagctctga 2300

Sequence Listing - P3230R1C1.txt

gatgaactca gttataggag aaaacctcca tgctggactc catctggcat 2350

tcaaaatctc cacagtaaaa tccaaagacc tcaaaaaaaaa aaaaaaaaaa 2400

aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaa 2436

<210> 100

<211> 596

<212> PRT

<213> Homo Sapien

<400> 100

Met Lys Met Gln Lys Gly Asn Val Leu Leu Met Phe Gly Leu Leu

1 5 10 15

Leu His Leu Glu Ala Ala Thr Asn Ser Asn Glu Thr Ser Thr Ser

20 25 30

Ala Asn Thr Gly Ser Ser Val Ile Ser Ser Gly Ala Ser Thr Ala

35 40 45

Thr Asn Ser Gly Ser Ser Val Thr Ser Ser Gly Val Ser Thr Ala

50 55 60

Thr Ile Ser Gly Ser Ser Val Thr Ser Asn Gly Val Ser Ile Val

65 70 75

Thr Asn Ser Glu Phe His Thr Thr Ser Ser Gly Ile Ser Thr Ala

80 85 90

Thr Asn Ser Glu Phe Ser Thr Ala Ser Ser Gly Ile Ser Ile Ala

95 100 105

Thr Asn Ser Glu Ser Ser Thr Thr Ser Ser Gly Ala Ser Thr Ala

110 115 120

Thr Asn Ser Glu Ser Ser Thr Pro Ser Ser Gly Ala Ser Thr Val

125 130 135

Thr Asn Ser Gly Ser Ser Val Thr Ser Ser Gly Ala Ser Thr Ala

140 145 150

Thr Asn Ser Glu Ser Ser Thr Val Ser Ser Arg Ala Ser Thr Ala

155 160 165

Thr Asn Ser Glu Ser Ser Thr Leu Ser Ser Gly Ala Ser Thr Ala

170 175 180

Thr Asn Ser Asp Ser Ser Thr Thr Ser Ser Gly Ala Ser Thr Ala

185 190 195

Thr Asn Ser Glu Ser Ser Thr Thr Ser Ser Gly Ala Ser Thr Ala

200 205 210

Thr Asn Ser Glu Ser Ser Thr Val Ser Ser Arg Ala Ser Thr Ala

215 220 225

# Sequence Listing - P3230R1C1.txt

Thr Asn Ser Glu Ser Ser Thr Thr Ser Ser Gly Ala Ser Thr Ala  
 230 235 240  
 Thr Asn Ser Glu Ser Arg Thr Thr Ser Asn Gly Ala Gly Thr Ala  
 245 250 255  
 Thr Asn Ser Glu Ser Ser Thr Thr Ser Ser Gly Ala Ser Thr Ala  
 260 265 270  
 Thr Asn Ser Asp Ser Ser Thr Val Ser Ser Gly Ala Ser Thr Ala  
 275 280 285  
 Thr Asn Ser Glu Ser Ser Thr Thr Ser Ser Gly Ala Ser Thr Ala  
 290 295 300  
 Thr Asn Ser Glu Ser Ser Thr Thr Ser Ser Gly Ala Ser Thr Ala  
 305 310 315  
 Thr Asn Ser Asp Ser Ser Thr Thr Ser Ser Gly Ala Gly Thr Ala  
 320 325 330  
 Thr Asn Ser Glu Ser Ser Thr Val Ser Ser Gly Ile Ser Thr Val  
 335 340 345  
 Thr Asn Ser Glu Ser Ser Thr Pro Ser Ser Gly Ala Asn Thr Ala  
 350 355 360  
 Thr Asn Ser Glu Ser Ser Thr Thr Ser Ser Gly Ala Asn Thr Ala  
 365 370 375  
 Thr Asn Ser Glu Ser Ser Thr Val Ser Ser Gly Ala Ser Thr Ala  
 380 385 390  
 Thr Asn Ser Glu Ser Ser Thr Thr Ser Ser Gly Val Ser Thr Ala  
 395 400 405  
 Thr Asn Ser Glu Ser Ser Thr Thr Ser Ser Gly Ala Ser Thr Ala  
 410 415 420  
 Thr Asn Ser Asp Ser Ser Thr Thr Ser Ser Glu Ala Ser Thr Ala  
 425 430 435  
 Thr Asn Ser Glu Ser Ser Thr Val Ser Ser Gly Ile Ser Thr Val  
 440 445 450  
 Thr Asn Ser Glu Ser Ser Thr Thr Ser Ser Gly Ala Asn Thr Ala  
 455 460 465  
 Thr Asn Ser Gly Ser Ser Val Thr Ser Ala Gly Ser Gly Thr Ala  
 470 475 480  
 Ala Leu Thr Gly Met His Thr Thr Ser His Ser Ala Ser Thr Ala  
 485 490 495

Sequence Listing - P3230R1C1.txt

Val Ser Glu Ala Lys Pro Gly Gly Ser Leu Val Pro Trp Glu Ile  
500 505 510

Phe Leu Ile Thr Leu Val Ser Val Val Ala Ala Val Gly Leu Phe  
515 520 525

Ala Gly Leu Phe Phe Cys Val Arg Asn Ser Leu Ser Leu Arg Asn  
530 535 540

Thr Phe Asn Thr Ala Val Tyr His Pro His Gly Leu Asn His Gly  
545 550 555

Leu Gly Pro Gly Pro Gly Gly Asn His Gly Ala Pro His Arg Pro  
560 565 570

Arg Trp Ser Pro Asn Trp Phe Trp Arg Arg Pro Val Ser Ser Ile  
575 580 585

Ala Met Glu Met Ser Gly Arg Asn Ser Gly Pro  
590 595

<210> 101

<211> 1728

<212> DNA

<213> Homo Sapien

<400> 101

ggccggacgc ctccgctta cgggatgaat taacggcggg ttccgcacgg 50

aggttgtagc ccctacggag cccagcttg cccacgcacc ccactcggcg 100  
tcgcgcggcg tgccctgctt gtcacaggtg ggaggctgga actatcaggc 150

tgaaaaacag agtgggtact ctcttctggg aagctggcaa caaatggatg 200

atgtgatata tgcattccag gggaaggga attgtggtgc ttctgaacc 250

atggtcaatt aacgaggcag ttctagcta ctgcacgtac ttcataaagc 300

aggactctaa aagctttgga atcatggtgt catggaaagg gatttacttt 350

atactgactc tgttttgggg aagctttttt ggaagcattt tcatgctgag 400

tcccttttta ccttgatgt ttgtaaacc atcttggtat cgctggatca 450

acaaccgcct tgtggcaaca tggtcaccc tacctgtggc attattggag 500

accatgtttg gtgtaaaagt gattataact ggggatgcat ttgttctgg 550

agaaagaagt gtcattatca tgaaccatcg gacaagaatg gactggatgt 600

tcctgtggaa ttgcctgatg cgatatagct acctcagatt ggagaaaatt 650

tgctcaaag cgagtctcaa aggtgttctt ggatttggtt gggccatgca 700

ggctgctgcc tatatcttca ttcataggaa atggaaggat gacaagagcc 750

Sequence Listing - P3230R1C1.txt

atttgaaga catgattgat tacttttgtg atattcacga accacttcaa 800  
 ctctcatat tcccagaagg gactgatctc acagaaaaca gcaagtctcg 850  
 aagtaatgca ttgtctgaaa aaaatggact tcagaaatat gaatatgttt 900  
 tacatccaag aactacaggc ttacttttg tggtagaccg tctaagagaa 950  
 ggtaagaacc ttgatgctgt ccatgatatc actgtggcgt atcctcacia 1000  
 cattcctcaa tcagagaagc acctcctcca aggagacttt cccagggaaa 1050  
 tccactttca cgtccaccgg tatccaatag acaccctccc cacatccaag 1100  
 gaggaccttc aactctgggtg ccacaaacgg tgggaagaga aagaagagag 1150  
 gctgcgttcc ttctatcaag gggagaagaa tttttattt accggacaga 1200  
 gtgtcattcc acctgcaag tctgaactca gggctctgt ggtcaaattg 1250  
 ctctctatac tgtattggac cctgttcagc cctgcaatgt gcctactcat 1300  
 atattgttac agtcttgta agtgggtattt tataatcacc attgtaatct 1350  
 ttgtgctgca agagagaata ttgggtggac tggagatcat agaacttgca 1400  
 tgttaccgac ttttacacia acagccacat ttaaattcaa agaaaaatga 1450  
 gtaagattat aaggtttgcc atgtgaaaac cttagacata tttggaaat 1500  
 gttctaaacc ttctaagct cagatgcatt ttgcatgac tatgtcgaat 1550  
 atttcttact gccatcatta ttgttaaag atattttgca cttattttg 1600  
 tgggaaaaat attgctacia ttttttta tctctgaatg taatttcgat 1650  
 actgtgtaca tagcaggagg tgatcggggg gaaataactt gggccagaat 1700  
 attattaaac aatcatcagg cttttaaa 1728

<210> 102

<211> 414

<212> PRT

<213> Homo Sapien

<400> 102

Met His Ser Arg Gly Arg Glu Ile Val Val Leu Leu Asn Pro Trp

1 5 10 15

Ser Ile Asn Glu Ala Val Ser Ser Tyr Cys Thr Tyr Phe Ile Lys

20 25 30

Gln Asp Ser Lys Ser Phe Gly Ile Met Val Ser Trp Lys Gly Ile

35 40 45



Sequence Listing - P3230R1C1.txt

Tyr Phe Ile Leu Thr Leu Phe Trp Gly Ser Phe Phe Gly Ser Ile  
 50 55 60  
 Phe Met Leu Ser Pro Phe Leu Pro Leu Met Phe Val Asn Pro Ser  
 65 70 75  
 Trp Tyr Arg Trp Ile Asn Asn Arg Leu Val Ala Thr Trp Leu Thr  
 80 85 90  
 Leu Pro Val Ala Leu Leu Glu Thr Met Phe Gly Val Lys Val Ile  
 95 100 105  
 Ile Thr Gly Asp Ala Phe Val Pro Gly Glu Arg Ser Val Ile Ile  
 110 115 120  
 Met Asn His Arg Thr Arg Met Asp Trp Met Phe Leu Trp Asn Cys  
 125 130 135  
 Leu Met Arg Tyr Ser Tyr Leu Arg Leu Glu Lys Ile Cys Leu Lys  
 140 145 150  
 Ala Ser Leu Lys Gly Val Pro Gly Phe Gly Trp Ala Met Gln Ala  
 155 160 165  
 Ala Ala Tyr Ile Phe Ile His Arg Lys Trp Lys Asp Asp Lys Ser  
 170 175 180  
 His Phe Glu Asp Met Ile Asp Tyr Phe Cys Asp Ile His Glu Pro  
 185 190 195  
 Leu Gln Leu Leu Ile Phe Pro Glu Gly Thr Asp Leu Thr Glu Asn  
 200 205 210  
 Ser Lys Ser Arg Ser Asn Ala Phe Ala Glu Lys Asn Gly Leu Gln  
 215 220 225  
 Lys Tyr Glu Tyr Val Leu His Pro Arg Thr Thr Gly Phe Thr Phe  
 230 235 240  
 Val Val Asp Arg Leu Arg Glu Gly Lys Asn Leu Asp Ala Val His  
 245 250 255  
 Asp Ile Thr Val Ala Tyr Pro His Asn Ile Pro Gln Ser Glu Lys  
 260 265 270  
 His Leu Leu Gln Gly Asp Phe Pro Arg Glu Ile His Phe His Val  
 275 280 285  
 His Arg Tyr Pro Ile Asp Thr Leu Pro Thr Ser Lys Glu Asp Leu  
 290 295 300  
 Gln Leu Trp Cys His Lys Arg Trp Glu Glu Lys Glu Glu Arg Leu  
 305 310 315

Sequence Listing - P3230R1C1.txt

Arg Ser Phe Tyr Gln Gly Glu Lys Asn Phe Tyr Phe Thr Gly Gln  
320 325 330

Ser Val Ile Pro Pro Cys Lys Ser Glu Leu Arg Val Leu Val Val  
335 340 345

Lys Leu Leu Ser Ile Leu Tyr Trp Thr Leu Phe Ser Pro Ala Met  
350 355 360

Cys Leu Leu Ile Tyr Leu Tyr Ser Leu Val Lys Trp Tyr Phe Ile  
365 370 375

Ile Thr Ile Val Ile Phe Val Leu Gln Glu Arg Ile Phe Gly Gly  
380 385 390

Leu Glu Ile Ile Glu Leu Ala Cys Tyr Arg Leu Leu His Lys Gln  
395 400 405

Pro His Leu Asn Ser Lys Lys Asn Glu  
410

<210> 103

<211> 2403

<212> DNA

<213> Homo Sapien

<400> 103

cggctcgagc ggctcgagt aagagcctct ccacggctcc tgcgcctgag 50

acagctggcc tgacctcaa atcatccatc caccctgct gtcattgtt 100

ttcatagtgt gagatcaacc cacaggaata tccatggctt ttgtgctcat 150

tttggttctc agtttctacg agctggtgtc aggacagtgg caagtcactg 200

gaccgggcaa gtttgtccag gccttggtgg gggaggacgc cgtgttctcc 250

tgctccctct ttcctgagac cagtgcagag gctatggaag tgcggttctt 300

caggaatcag ttccatgctg tgggccacct ctacagagat ggggaagact 350

gggaatctaa gcagatgcca cagtatcgag ggagaactga gtttgtgaag 400

gactccattg caggggggagc tgtctctcta aggctaaaaa acatcactcc 450

ctcggacatc ggctgtatg ggtgctggtt cagttcccag atttacgatg 500

aggaggccac ctgggagctg cgggtggcag cactgggctc acttctctc 550

atttccatcg tgggatatgt tgacggaggt atccagttac tctgctgtc 600

ctcaggctgg tccccagc ccacagccaa gtggaaaggt ccacaaggac 650

aggattgtc ttcagactcc agagcaaatg cagatgggta cagcctgtat 700

Sequence Listing - P3230R1C1.txt

gatgtggaga tctccattat agtccaggaa aatgctggga gcatatttg 750  
ttccatccac ctgctgagc agagtcata ggtggaatcc aaggtattga 800  
taggagagac gttttccag ccctcacctt ggcgctggc ttctatttta 850  
ctcgggttac tctgtgtgc cctgtgtgtt gttgtcatgg ggatgataat 900  
tgttttcttc aaatccaaag ggaaaatcca ggcggaactg gactggagaa 950  
gaaagcacgg acaggcagaa ttgagagacg cccggaaaca cgagtgag 1000  
gtgactctgg atccagagac ggctacccg aagctctgcg tttctgatct 1050  
gaaaactgta acccatagaa aagctcccca ggaggtgcct cactctgaga 1100  
agagatttac aaggaagagt gtggtggctt ctgagggtt ccaagcagg 1150  
agacattact gggaggtgga cgtgggacaa aatgtagggt ggtatgtgg 1200  
agtgtgtcgg gatgacgtag acagggggaa gaacaatgtg actttgtctc 1250  
ccaacaatgg gtattgggtc ctgactga caacagaaca ttgtatttc 1300  
acattcaatc cccattttat cagcctcccc cccagcacc ctctacacg 1350  
agtaggggtc ttctggact atgagggtg gaccatctc ttctcaata 1400  
caaatgacca gtcccttatt tataacctg tgacatgtca gtttgaagg 1450  
ttgttgagac cctatatcca gcatcgatg tatgacgagg aaaaggggac 1500  
tcccatattc atatgtccag tgcctgggg atgagacaga gaagaccctg 1550  
cttaaagggc cccacaccac agaccagac acagccaagg gagagtgtc 1600  
ccgacaggtg gccccagctt cctctccgga gcctgcgcac agagagtcac 1650  
gccccccact ctcttttagg gagctgaggt tcttctgcc tgagccctgc 1700  
agcagcggca gtcacagctt ccagatgagg ggggattggc ctgaccctgt 1750  
gggagtcaga agccatggct gccctgaagt ggggacggaa tagactcaca 1800  
ttaggtttag tttgtgaaaa ctccatccag ctaagcgatc ttgaacaagt 1850  
cacaacctcc caggctctc atttgctagt cacggacagt gattcctgcc 1900  
tcacaggtga agattaaaga gacaacgaat gtgaatcatg ctgacaggt 1950  
tgagggcaca gtgtttgcta atgatgtgtt ttatattat acattttccc 2000  
accataaact ctgtttgctt attccacatt aatttactt tctctatacc 2050  
aaatcaccca tggaatagtt attgaacacc tgctttgtga ggctcaaaga 2100

Sequence Listing - P3230R1C1.txt

ataaagagga ggtaggattt ttcactgatt ctataagccc agcattacct 2150  
gatacaaaaa ccaggcaaag aaaacagaag aagaggaagg aaaactacag 2200  
gtccatatcc ctcattaaca cagacacaaa aattctaaat aaaattttaa 2250  
caaattaaac taaacaatat atttaaagat gatataaac tactcagtgt 2300  
ggtttggtccc acaaatgcag agttgggtta atatttaa atcaaccagt 2350  
gtaattcagc acattaataa agtaaaaaag aaaaccataa aaaaaaaaaa 2400  
aaa 2403

<210> 104  
<211> 466  
<212> PRT  
<213> Homo Sapien

<400> 104  
Met Ala Phe Val Leu Ile Leu Val Leu Ser Phe Tyr Glu Leu Val  
1 5 10 15  
Ser Gly Gln Trp Gln Val Thr Gly Pro Gly Lys Phe Val Gln Ala  
20 25 30  
Leu Val Gly Glu Asp Ala Val Phe Ser Cys Ser Leu Phe Pro Glu  
35 40 45  
Thr Ser Ala Glu Ala Met Glu Val Arg Phe Phe Arg Asn Gln Phe  
50 55 60  
His Ala Val Val His Leu Tyr Arg Asp Gly Glu Asp Trp Glu Ser  
65 70 75  
Lys Gln Met Pro Gln Tyr Arg Gly Arg Thr Glu Phe Val Lys Asp  
80 85 90  
Ser Ile Ala Gly Gly Arg Val Ser Leu Arg Leu Lys Asn Ile Thr  
95 100 105  
Pro Ser Asp Ile Gly Leu Tyr Gly Cys Trp Phe Ser Ser Gln Ile  
110 115 120  
Tyr Asp Glu Glu Ala Thr Trp Glu Leu Arg Val Ala Ala Leu Gly  
125 130 135  
Ser Leu Pro Leu Ile Ser Ile Val Gly Tyr Val Asp Gly Gly Ile  
140 145 150  
Gln Leu Leu Cys Leu Ser Ser Gly Trp Phe Pro Gln Pro Thr Ala  
155 160 165  
Lys Trp Lys Gly Pro Gln Gly Gln Asp Leu Ser Ser Asp Ser Arg

Sequence Listing - P3230R1C1.txt

170	175	180
Ala Asn Ala Asp Gly Tyr Ser Leu Tyr Asp Val Glu Ile Ser Ile		
185	190	195
Ile Val Gln Glu Asn Ala Gly Ser Ile Leu Cys Ser Ile His Leu		
200	205	210
Ala Glu Gln Ser His Glu Val Glu Ser Lys Val Leu Ile Gly Glu		
215	220	225
Thr Phe Phe Gln Pro Ser Pro Trp Arg Leu Ala Ser Ile Leu Leu		
230	235	240
Gly Leu Leu Cys Gly Ala Leu Cys Gly Val Val Met Gly Met Ile		
245	250	255
Ile Val Phe Phe Lys Ser Lys Gly Lys Ile Gln Ala Glu Leu Asp		
260	265	270
Trp Arg Arg Lys His Gly Gln Ala Glu Leu Arg Asp Ala Arg Lys		
275	280	285
His Ala Val Glu Val Thr Leu Asp Pro Glu Thr Ala His Pro Lys		
290	295	300
Leu Cys Val Ser Asp Leu Lys Thr Val Thr His Arg Lys Ala Pro		
305	310	315
Gln Glu Val Pro His Ser Glu Lys Arg Phe Thr Arg Lys Ser Val		
320	325	330
Val Ala Ser Gln Gly Phe Gln Ala Gly Arg His Tyr Trp Glu Val		
335	340	345
Asp Val Gly Gln Asn Val Gly Trp Tyr Val Gly Val Cys Arg Asp		
350	355	360
Asp Val Asp Arg Gly Lys Asn Asn Val Thr Leu Ser Pro Asn Asn		
365	370	375
Gly Tyr Trp Val Leu Arg Leu Thr Thr Glu His Leu Tyr Phe Thr		
380	385	390
Phe Asn Pro His Phe Ile Ser Leu Pro Pro Ser Thr Pro Pro Thr		
395	400	405
Arg Val Gly Val Phe Leu Asp Tyr Glu Gly Gly Thr Ile Ser Phe		
410	415	420
Phe Asn Thr Asn Asp Gln Ser Leu Ile Tyr Thr Leu Leu Thr Cys		
425	430	435
Gln Phe Glu Gly Leu Leu Arg Pro Tyr Ile Gln His Ala Met Tyr		
440	445	450

Sequence Listing - P3230R1C1.txt

Asp Glu Glu Lys Gly Thr Pro Ile Phe Ile Cys Pro Val Ser Trp  
455 460 465

Gly

<210> 105

<211> 2103

<212> DNA

<213> Homo Sapien

<400> 105

ccttcacagg actcttcatt gctggttggc aatgatgtat cggccagatg 50  
tggtgagggc taggaaaaga gtttgttggg aaccctgggt tatcggcctc 100  
gtcatcttca tatccctgat tgtcttgga gtgtgcattg gactcactgt 150  
tcattatgtg agatataatc aaaagaagac ctacaattac tatagcacat 200  
tgtcatttac aactgacaaa ctatatgctg agtttggcag agaggcttct 250  
aacaatttta cagaaatgag ccagagactt gaatcaatgg tgaaaaatgc 300  
atttataaa tctccattaa gggaagaatt tgtcaagtct caggttatca 350  
agttcagtca acagaagcat ggagtgttgg ctcatatgct gttgatttgt 400  
agatttcact ctactgagga tcctgaaact gtagataaaa ttgttcaact 450  
tgttttacat gaaaagctgc aagatgctgt aggacccct aaagtagatc 500  
ctcactcagt taaaattaaa aaaatcaaca agacagaaac agacagctat 550  
ctaaaccatt gctgcggaac acgaagaagt aaaactctag gtcagagtct 600  
caggatcgtt ggtgggacag aagtagaaga ggggtgaatgg ccctggcagg 650  
ctagcctgca gtgggatggg agtcatcgct gtggagcaac ctttaattaat 700  
gccacatggc ttgtgagtgc tgctcactgt ttacaacat ataagaacct 750  
tgccagatgg actgcttctt ttggagtaac aataaaacct tcgaaaatga 800  
aacgggggtct ccggagaata attgtccatg aaaaatacaa acacccatca 850  
catgactatg atatttctct tgcagagctt tctagccctg ttcctacac 900  
aaatgcagta catagagttt gtctccctga tgcacctat gagtttcaac 950  
caggatgatg gatgtttgtg acaggatttg gagcactgaa aatgatggg 1000  
tacagtcaa atcatcttcg acaagcacag gtgactctca tagacgctac 1050  
aacttgcaat gaacctcaag ctacaatga cgccataact cctagaatgt 1100

Sequence Listing - P3230R1C1.txt

tatgtgctgg ctcttagaa ggaaaaacag atgcatgcca gggtgactct 1150  
ggaggaccac tggtagttc agatgctaga gatatctggt accttgctgg 1200  
aatagtgagc tggggagatg aatgtgcaa acccaacaag cctggtgttt 1250  
atactagagt tacggccttg cgggactgga ttactcaaa aactggtatc 1300  
taagagacaa aagcctcatg gaacagataa cttttttt tgtttttg 1350  
gtgtggaggc ctttttaga gatacagaat tggagaagac ttgaaaaca 1400  
gctagatttg actgatctca ataaactgtt tgcttgatgc atgtatttc 1450  
ttcccagctc tgtccgcac gtaagcatcc tgctctgcc agatcaactc 1500  
tgtcatctgt gagcaatagt tgaaacttta tgtacataga gaaatagata 1550  
atacaatatt acattacagc ctgtattcat ttgttctta gaagttttgt 1600  
cagaatttg actgttgac ataaattgt aatgcatata tacaattga 1650  
agcactcctt ttctcagtt cctcagctcc tctcattca gcaaatatcc 1700  
attttcaagg tgcagaacaa ggagtgaag aaaatataag aagaaaaaa 1750  
tcccctacat ttattggca cagaaaagta ttaggtgttt ttcttagtgg 1800  
aatattagaa atgatcatat tcattatgaa aggtcaagca aagacagcag 1850  
aataccaatc acttcatcat ttaggaagta tgggaactaa gttaaggaag 1900  
tccagaaaga agccaagata tacccttatt ttcattcca aacaactact 1950  
atgataaatg tgaagaagat tctgttttt tgtagcctat aataattata 2000  
caaacttcat gcaatgtact tgttctaagc aaattaaagc aaatatttat 2050  
ttaacattgt tactgaggat gtcaacatat aacaataaaa tataaatcac 2100  
cca 2103

<210> 106

<211> 423

<212> PRT

<213> Homo Sapien

<400> 106

Met Met Tyr Arg Pro Asp Val Val Arg Ala Arg Lys Arg Val Cys  
1 5 10 15

Trp Glu Pro Trp Val Ile Gly Leu Val Ile Phe Ile Ser Leu Ile  
20 25 30

Val Leu Ala Val Cys Ile Gly Leu Thr Val His Tyr Val Arg Tyr

Sequence Listing - P3230R1C1.txt

35	40	45
Asn Gln Lys Lys Thr Tyr	Asn Tyr Tyr Ser Thr	Leu Ser Phe Thr
50	55	60
Thr Asp Lys Leu Tyr Ala	Glu Phe Gly Arg Glu	Ala Ser Asn Asn
65	70	75
Phe Thr Glu Met Ser Gln	Arg Leu Glu Ser Met	Val Lys Asn Ala
80	85	90
Phe Tyr Lys Ser Pro Leu	Arg Glu Glu Phe Val	Lys Ser Gln Val
95	100	105
Ile Lys Phe Ser Gln Gln	Lys His Gly Val Leu	Ala His Met Leu
110	115	120
Leu Ile Cys Arg Phe His	Ser Thr Glu Asp Pro	Glu Thr Val Asp
125	130	135
Lys Ile Val Gln Leu Val	Leu His Glu Lys Leu	Gln Asp Ala Val
140	145	150
Gly Pro Pro Lys Val Asp	Pro His Ser Val Lys	Ile Lys Lys Ile
155	160	165
Asn Lys Thr Glu Thr Asp	Ser Tyr Leu Asn His	Cys Cys Gly Thr
170	175	180
Arg Arg Ser Lys Thr Leu	Gly Gln Ser Leu Arg	Ile Val Gly Gly
185	190	195
Thr Glu Val Glu Glu Gly	Glu Trp Pro Trp Gln	Ala Ser Leu Gln
200	205	210
Trp Asp Gly Ser His Arg	Cys Gly Ala Thr Leu	Ile Asn Ala Thr
215	220	225
Trp Leu Val Ser Ala Ala	His Cys Phe Thr Thr	Tyr Lys Asn Pro
230	235	240
Ala Arg Trp Thr Ala Ser	Phe Gly Val Thr Ile	Lys Pro Ser Lys
245	250	255
Met Lys Arg Gly Leu Arg	Arg Ile Ile Val His	Glu Lys Tyr Lys
260	265	270
His Pro Ser His Asp Tyr	Asp Ile Ser Leu Ala	Glu Leu Ser Ser
275	280	285
Pro Val Pro Tyr Thr Asn	Ala Val His Arg Val	Cys Leu Pro Asp
290	295	300
Ala Ser Tyr Glu Phe Gln	Pro Gly Asp Val Met	Phe Val Thr Gly
305	310	315



Sequence Listing - P3230R1C1.txt

Phe Gly Ala Leu Lys Asn Asp Gly Tyr Ser Gln Asn His Leu Arg  
320 325 330

Gln Ala Gln Val Thr Leu Ile Asp Ala Thr Thr Cys Asn Glu Pro  
335 340 345

Gln Ala Tyr Asn Asp Ala Ile Thr Pro Arg Met Leu Cys Ala Gly  
350 355 360

Ser Leu Glu Gly Lys Thr Asp Ala Cys Gln Gly Asp Ser Gly Gly  
365 370 375

Pro Leu Val Ser Ser Asp Ala Arg Asp Ile Trp Tyr Leu Ala Gly  
380 385 390

Ile Val Ser Trp Gly Asp Glu Cys Ala Lys Pro Asn Lys Pro Gly  
395 400 405

Val Tyr Thr Arg Val Thr Ala Leu Arg Asp Trp Ile Thr Ser Lys  
410 415 420

Thr Gly Ile

<210> 107

<211> 2397

<212> DNA

<213> Homo Sapien

<400> 107

agagaaagaa gcgtctccag ctgaagccaa tgcagccctc cggctctccg 50

cgaagaagtt ccctgccccg atgagcccc gccgtgcgtc cccgactatc 100

cccaggcggg cgtggggcac cgggcccagc gccgacgac gctgccgttt 150

tgcccttggg agtaggatgt ggtgaaagga tggggcttct cccttacggg 200

gtcacaatg gccagagaag attccgtgaa gtgtctgcgc tgctgtctt 250

acgccctcaa tctgtcttt tggttaatgt ccatcagtgt gttggcagtt 300

tctgcttggg tgagggacta cctaaataat gttctcactt taactgcaga 350

aacgagggta gaggaagcag tcattttgac ttactttcct gtggttcac 400

cggatcatgat tgctgtttgc tgtttccta tcattgtggg gatgttagga 450

tattgtggaa cggtgaaaag aaatctgttg cttcttgcac ggtacttttg 500

aagtttgctt gtcattttct gtgtagaact ggcttgtggc gtttgacat 550

atgaacagga acttatgggt ccagtacaat ggtagatat ggtcactttg 600

Sequence Listing - P3230R1C1.txt

aaagccagga tgacaaatta tggattacct agatatcggg ggcttactca 650  
tgcttggaat tttttcaga gagagttaa gtgctgtgga gtagtatatt 700  
tcactgactg gttggaaatg acagagatgg actggccccc agattcctgc 750  
tgtgttagag aattcccagg atgttccaaa caggcccacc aggaagatct 800  
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gaggaaccaa acaactgcag gtgctgaggt ttctgggaat ctccattggg 900  
gtgacacaaa tcctggccat gattctcacc attactctgc tctgggctct 950  
gtattatgat agaagggagc ctgggacaga ccaatgatg tccttgaaga 1000  
atgacaactc tcagcacctg tcatgtccct cagtagaact gttgaaacca 1050  
agcctgtcaa gaatcttga acacacatcc atggcaaaca gctttaatac 1100  
acacttgag atggaggagt tataaaaaga aatgtcacag aagaaaacca 1150  
caaactgtt ttattggact tgtgaatttt tgagtacata ctatgtgtt 1200  
cagaaatatg tagaaataaa aatgttgcca taaaataaca cctaagcata 1250  
tactattcta tgcttataaa tgaggatgga aaagttcat gtcataagtc 1300  
accactgga caataattga tgccttaaa atgctgaaga cagatgtcat 1350  
accactgtg tagcctgtgt atgacttta ctgaacacag ttatgtttg 1400  
aggcagcatg gtttgattag catttccgca tccatgcaaa cgagtcacat 1450  
atggtgggac tggagccata gttaaagggtg atttacttct accaactagt 1500  
atataaagta ctaattaaat gctaacatag gaagttagaa aataactaata 1550  
acttttatta ctacgcatc tattcttctg atgctaaata aattatatat 1600  
cagaaaactt tcaatattgg tgactaccta aatgtgattt ttgctggta 1650  
ctaaaatatt ctaccactt aaaagagcaa gctaacacat tgtcttaagc 1700  
tgatcagga tttttgtat ataagtctgt gttaaactcg tataattcag 1750  
tcgatttcag ttctgataat gttaagaata accattatga aaaggaaaat 1800  
ttgtcctgta tagcatcatt attttagcc ttctctgta ataaagcttt 1850  
actattctgt cctgggctta tattacacat ataactgtta tttaaatact 1900  
taaccactaa tttgaaaat taccagtgtg atacatagga atcattattc 1950  
agaatgtagt ctggtcttta ggaagtatta ataagaaaat ttgcacataa 2000

Sequence Listing - P3230R1C1.txt

cttagttgat tcagaaagga cttgtatgct gtttttctcc caaatgaaga 2050

ctctttttga cactaaacac tttttaaaaa gcttatcttt gccttctcca 2100

aacaagaagc aatagtctcc aagtcaatat aaattctaca gaaaatagtg 2150

ttctttttct ccagaaaaat gcttgtagaga atcattaaaa catgtgacaa 2200

tttagagatt cttgttttta tttcactgat taatatactg tggcaaatta 2250

cacagattat taaatttttt tacaagagta tagtatattt atttgaaatg 2300

ggaaaagtcg attttactgt attttgtgta ttttgtttat ttctcagaat 2350

atggaaagaa aattaaaatg tgtcaataaa tattttctag agagtaa 2397

<210> 108

<211> 305

<212> PRT

<213> Homo Sapien

<400> 108

Met Ala Arg Glu Asp Ser Val Lys Cys Leu Arg Cys Leu Leu Tyr

1 5 10 15

Ala Leu Asn Leu Leu Phe Trp Leu Met Ser Ile Ser Val Leu Ala

20 25 30

Val Ser Ala Trp Met Arg Asp Tyr Leu Asn Asn Val Leu Thr Leu

35 40 45

Thr Ala Glu Thr Arg Val Glu Glu Ala Val Ile Leu Thr Tyr Phe

50 55 60

Pro Val Val His Pro Val Met Ile Ala Val Cys Cys Phe Leu Ile

65 70 75

Ile Val Gly Met Leu Gly Tyr Cys Gly Thr Val Lys Arg Asn Leu

80 85 90

Leu Leu Leu Ala Trp Tyr Phe Gly Ser Leu Leu Val Ile Phe Cys

95 100 105

Val Glu Leu Ala Cys Gly Val Trp Thr Tyr Glu Gln Glu Leu Met

110 115 120

Val Pro Val Gln Trp Ser Asp Met Val Thr Leu Lys Ala Arg Met

125 130 135

Thr Asn Tyr Gly Leu Pro Arg Tyr Arg Trp Leu Thr His Ala Trp

140 145 150

Asn Phe Phe Gln Arg Glu Phe Lys Cys Cys Gly Val Val Tyr Phe

155 160 165

Thr Asp Trp Leu Glu Met Thr Glu Met Asp Trp Pro Pro Asp Ser

Sequence Listing - P3230R1C1.txt

170	175	180
Cys Cys Val Arg Glu Phe Pro Gly Cys Ser Lys Gln Ala His Gln		
185	190	195
Glu Asp Leu Ser Asp Leu Tyr Gln Glu Gly Cys Gly Lys Lys Met		
200	205	210
Tyr Ser Phe Leu Arg Gly Thr Lys Gln Leu Gln Val Leu Arg Phe		
215	220	225
Leu Gly Ile Ser Ile Gly Val Thr Gln Ile Leu Ala Met Ile Leu		
230	235	240
Thr Ile Thr Leu Leu Trp Ala Leu Tyr Tyr Asp Arg Arg Glu Pro		
245	250	255
Gly Thr Asp Gln Met Met Ser Leu Lys Asn Asp Asn Ser Gln His		
260	265	270
Leu Ser Cys Pro Ser Val Glu Leu Leu Lys Pro Ser Leu Ser Arg		
275	280	285
Ile Phe Glu His Thr Ser Met Ala Asn Ser Phe Asn Thr His Phe		
290	295	300
Glu Met Glu Glu Leu		
305		

<210> 109

<211> 2339

<212> DNA

<213> Homo Sapien

<400> 109

ccaaggccag agctgtggac accttatccc actcatcctc atcctcttcc 50

tctgataaag cccctaccag tgctgataaa gtctttctcg tgagagccta 100

gaggccttaa aaaaaaaagt gcttgaaaga gaaggggaca aaggaacacc 150

agtattaaga ggattttcca gtgtttctgg cagttgggcc agaaggatgc 200

ctccattcct gcttctcacc tgcctttca tcacaggcac ctccgtgtca 250

cccgtagccc tagatccttg ttctgcttac atcagcctga atgagccctg 300

gaggaacact gaccaccagt tggatgagtc tcaaggtcct cctctatgtg 350

acaaccatgt gaatggggag tgggtaccact tcacgggcat ggcgggagat 400

gccatgccta cttctgcat accagaaaac cactgtggaa cccacgcacc 450

tgtctggctc aatggcagcc accccctaga aggcgacggc attgtgcaac 500

Sequence Listing - P3230R1C1.txt

gccaggcttg tgccagcttc aatgggaact gctgtctctg gaacaccacg 550  
gtggaagtca aggcttgccc tggaggctac tatgtgtatc gtctgaccaa 600  
gcccagcgtc tgcttcacg tctactgtgg tcatttttat gacatctgcg 650  
acgaggactg ccatggcagc tgctcagata ccagcgagtg cacatgcgct 700  
ccaggaactg tgctaggccc tgacaggcag acatgctttg atgaaaatga 750  
atgtgagcaa aacaacggtg gctgcagtga gatctgtgtg aacctcaaaa 800  
actcctaccg ctgtgagtgt ggggttgccc gtgtgctaag aagtgatggc 850  
aagacttgtg aagacgttga aggatgccac aataacaatg gtggctgcag 900  
ccactcttgc ctggatctg agaaaggcta ccagtgtgaa tgtccccggg 950  
gcctggtgct gtctgaggat aaccacactt gccagtccc tgtgttgctc 1000  
aatcaaatg ccattgaagt gaacatcccc agggagctgg ttggtggcct 1050  
ggagctcttc ctgaccaaca cctcctgccg aggagtgtcc aacggcaccc 1100  
atgtcaacat cctcttctct ctcaagacat gtggtacagt ggtcgatgtg 1150  
gtgaatgaca agattgtggc cagcaacctc gtgacaggtc tacccaagca 1200  
gacccggggg agcagcgggg acttcatcat ccgaaccagc aagctgctga 1250  
tcccggtgac ctgcgagttt ccacgcctgt acaccatttc tgaaggatac 1300  
gttccaacc ttcgaaactc cccactggaa atcatgagcc gaaatcatgg 1350  
gatcttccca ttactctgg agatcttcaa ggacaatgag ttgaagagc 1400  
cttaccggga agctctgccc accctcaagc ttcgtgactc cctctacttt 1450  
ggcattgagc ccgtggtgca cgtgagcggc ttggaaagct tgggtggagag 1500  
ctgctttgcc accccacct ccaagatcga cgaggtcctg aaatactacc 1550  
tcatccggga tggctgtgtt tcagatgact cggtaaagca gtacacatcc 1600  
cgggatcacc tagcaaagca ctccaggtc cctgtcttca agtttgtggg 1650  
caaagaccac aaggaagtgt ttctgcactg ccgggttctt gtctgtggag 1700  
tgttggaaga gcgttccgc tgtgcccagg gttgccaccg gcgaatgcgt 1750  
cgtggggcag gaggagagga ctacggcggc ctacagggcc agacgctaac 1800  
aggcggcccc atccgcatcg actgggagga ctagtctgta gccatactc 1850  
gagtcctgc attggacggc tctgctcttt ggagcttctc cccccaccgc 1900

Sequence Listing - P3230R1C1.txt

cctctaagaa catctgcca cagctgggtt cagacttcac actgtgagtt 1950  
cagactccca gcaccaactc actctgattc tgggtccattc agtgggcaca 2000  
ggtcacagca ctgctgaaca atgtggcctg ggtgggggtt catctttcta 2050  
gggttgaaaa ctaaactgtc caccagaaa gacactcacc ccatttcct 2100  
catttcttc ctacacttaa atacctctg tatggtgcaa tcagaccaca 2150  
aatcagaag ctgggtataa tatttcaagt taaaaccct agaaaaatta 2200  
aacagttact gaaattatga cttaaatacc caatgactcc ttaaatatgt 2250  
aaattatagt tataccttga aatttcaatt caaatgcaga ctaattatag 2300  
ggaatttggga agtgtatcaa taaaacagta tataatttt 2339

<210> 110  
<211> 545  
<212> PRT  
<213> Homo Sapien

<400> 110  
Met Pro Pro Phe Leu Leu Leu Thr Cys Leu Phe Ile Thr Gly Thr  
1 5 10 15  
Ser Val Ser Pro Val Ala Leu Asp Pro Cys Ser Ala Tyr Ile Ser  
20 25 30  
Leu Asn Glu Pro Trp Arg Asn Thr Asp His Gln Leu Asp Glu Ser  
35 40 45  
Gln Gly Pro Pro Leu Cys Asp Asn His Val Asn Gly Glu Trp Tyr  
50 55 60  
His Phe Thr Gly Met Ala Gly Asp Ala Met Pro Thr Phe Cys Ile  
65 70 75  
Pro Glu Asn His Cys Gly Thr His Ala Pro Val Trp Leu Asn Gly  
80 85 90  
Ser His Pro Leu Glu Gly Asp Gly Ile Val Gln Arg Gln Ala Cys  
95 100 105  
Ala Ser Phe Asn Gly Asn Cys Cys Leu Trp Asn Thr Thr Val Glu  
110 115 120  
Val Lys Ala Cys Pro Gly Gly Tyr Tyr Val Tyr Arg Leu Thr Lys  
125 130 135  
Pro Ser Val Cys Phe His Val Tyr Cys Gly His Phe Tyr Asp Ile  
140 145 150  
Cys Asp Glu Asp Cys His Gly Ser Cys Ser Asp Thr Ser Glu Cys

Sequence Listing - P3230R1C1.txt

155	160	165
Thr Cys Ala Pro Gly Thr Val Leu Gly Pro Asp Arg Gln Thr Cys		
170	175	180
Phe Asp Glu Asn Glu Cys Glu Gln Asn Asn Gly Gly Cys Ser Glu		
185	190	195
Ile Cys Val Asn Leu Lys Asn Ser Tyr Arg Cys Glu Cys Gly Val		
200	205	210
Gly Arg Val Leu Arg Ser Asp Gly Lys Thr Cys Glu Asp Val Glu		
215	220	225
Gly Cys His Asn Asn Asn Gly Gly Cys Ser His Ser Cys Leu Gly		
230	235	240
Ser Glu Lys Gly Tyr Gln Cys Glu Cys Pro Arg Gly Leu Val Leu		
245	250	255
Ser Glu Asp Asn His Thr Cys Gln Val Pro Val Leu Cys Lys Ser		
260	265	270
Asn Ala Ile Glu Val Asn Ile Pro Arg Glu Leu Val Gly Gly Leu		
275	280	285
Glu Leu Phe Leu Thr Asn Thr Ser Cys Arg Gly Val Ser Asn Gly		
290	295	300
Thr His Val Asn Ile Leu Phe Ser Leu Lys Thr Cys Gly Thr Val		
305	310	315
Val Asp Val Val Asn Asp Lys Ile Val Ala Ser Asn Leu Val Thr		
320	325	330
Gly Leu Pro Lys Gln Thr Pro Gly Ser Ser Gly Asp Phe Ile Ile		
335	340	345
Arg Thr Ser Lys Leu Leu Ile Pro Val Thr Cys Glu Phe Pro Arg		
350	355	360
Leu Tyr Thr Ile Ser Glu Gly Tyr Val Pro Asn Leu Arg Asn Ser		
365	370	375
Pro Leu Glu Ile Met Ser Arg Asn His Gly Ile Phe Pro Phe Thr		
380	385	390
Leu Glu Ile Phe Lys Asp Asn Glu Phe Glu Glu Pro Tyr Arg Glu		
395	400	405
Ala Leu Pro Thr Leu Lys Leu Arg Asp Ser Leu Tyr Phe Gly Ile		
410	415	420
Glu Pro Val Val His Val Ser Gly Leu Glu Ser Leu Val Glu Ser		
425	430	435

Sequence Listing - P3230R1C1.txt

Cys Phe Ala Thr Pro Thr Ser Lys Ile Asp Glu Val Leu Lys Tyr  
440 445 450

Tyr Leu Ile Arg Asp Gly Cys Val Ser Asp Asp Ser Val Lys Gln  
455 460 465

Tyr Thr Ser Arg Asp His Leu Ala Lys His Phe Gln Val Pro Val  
470 475 480

Phe Lys Phe Val Gly Lys Asp His Lys Glu Val Phe Leu His Cys  
485 490 495

Arg Val Leu Val Cys Gly Val Leu Asp Glu Arg Ser Arg Cys Ala  
500 505 510

Gln Gly Cys His Arg Arg Met Arg Arg Gly Ala Gly Gly Glu Asp  
515 520 525

Ser Ala Gly Leu Gln Gly Gln Thr Leu Thr Gly Gly Pro Ile Arg  
530 535 540

Ile Asp Trp Glu Asp  
545

<210> 111

<211> 2063

<212> DNA

<213> Homo Sapien

<400> 111

gagagaggca gcagcttgct cagcggacaa ggatgctggg cgtgaggac 50

caaggcctgc cctgcactcg ggcctcctcc agccagtgtc gaccagggac 100

ttctgacctg ctggccagcc aggacctgtg tggggaggcc ctctgtctgc 150

cttgggggtga caatctcagc tccaggctac agggagaccg ggaggatcac 200

agagccagca tgttacagga tctgacagt gatcaacctc tgaacagcct 250

cgatgtcaaa ccctgcgcga aacccgtat cccatggag accttcagaa 300

aggtggggat cccatcatc atagcactac tgagcctggc gaggatcatc 350

atttggttg tcctcatcaa ggtgattctg gataaatact acttcctctg 400

cgggcagcct ctccattca tcccaggagaa gcagctgtgt gacggagagc 450

tggactgtcc ctggggggag gacgaggagc actgtgtcaa gagcttcccc 500

gaagggcctg cagtggcagt ccgcctctcc aaggaccgat ccacactgca 550

gggtgctggac tcggccacag ggaactgggt ctctgctgtg ttcgacaact 600



Sequence Listing - P3230R1C1.txt

tcacagaagc tctcgctgag acagcctgta ggcatgagg ctacagcaga 650  
gctgtggaga ttggcccaga ccaggatctg gatgtgttg aatcacaga 700  
aaacagccag gagcttcgca tgcggaactc aagtggggcc tgtctctcag 750  
gctccctggt ctccctgcac tgtctgcct gtgggaagag cctgaagacc 800  
ccccgtgtgg tgggtgggga ggaggcctct gtggattctt ggcttggca 850  
ggtcagcatc cagtagaca aacagcacgt ctgtggaggg agcatcctgg 900  
acccccactg ggtctcacg gcagcccact gcttcaggaa acataccgat 950  
gtgttcaact ggaaggtgag ggcatgctca gacaaactgg gcagctccc 1000  
atccctgggt gtggccaaga tcatcatcat tgaattcaac cccatgtacc 1050  
ccaaagacaa tgacatgcc ctcatgaagc tgcagttccc actcacttc 1100  
tcaggcacag tcaggcccat ctgtctgccc tctttgatg aggagctcac 1150  
tccagccacc cactctgga tcattggatg gggctttacg aagcagaatg 1200  
gaggggaagat gtctgacata ctgtgcagg cgtcagtcca ggtcattgac 1250  
agcacacggg gcaatgcaga cgatgcgtac cagggggaag tcaccgagaa 1300  
gatgatgtgt gcaggcatcc cggaaggggg tgtggacacc tgccaggggtg 1350  
acagtgggtg gcccctgatg taccaatctg accagtggca tgtggtgggc 1400  
atcgtagct ggggctatgg ctgcgggggc ccgagcacc caggagtata 1450  
caccaagggtc tcagcctatc tcaactggat ctacaatgtc tggaaggctg 1500  
agctgtaatg ctgtgcccc ttgcatgctc tgggagccgc ttcctctctg 1550  
ccctgccac ctggggatcc ccaaagtca gacacagagc aagagtcccc 1600  
ttgggtacac cctctgccc acagcctcag catttcttg agcagcaaag 1650  
ggcctcaatt cctgtaagag accctgcag cccagaggcg cccagaggaa 1700  
gtcagcagcc ctagctcggc cacacttgtt gctccagca tcccaggag 1750  
agacacagcc cactgaacaa ggtctcagg gtattgctaa gccaagaagg 1800  
aactttcca cactactgaa tggaagcagg ctgtcttgta aaagcccaga 1850  
tcactgtggg ctggagagga gaaggaaagg gtctgcgcca gccctgtccg 1900  
tcttcacca tcccaagcc tactagagca agaaaccagt tgtaataaa 1950  
aatgcactgc cctactgttg gtatgactac cgttacctac tgtgtcatt 2000

Sequence Listing - P3230R1C1.txt

gttattacag ctatggccac tattattaa gagctgtgta acatctctgg 2050

caaaaaaaaa aaa 2063

<210> 112

<211> 432

<212> PRT

<213> Homo Sapien

<400> 112

Met Leu Gln Asp Pro Asp Ser Asp Gln Pro Leu Asn Ser Leu Asp

1 5 10 15

Val Lys Pro Leu Arg Lys Pro Arg Ile Pro Met Glu Thr Phe Arg

20 25 30

Lys Val Gly Ile Pro Ile Ile Ile Ala Leu Leu Ser Leu Ala Ser

35 40 45

Ile Ile Ile Val Val Val Leu Ile Lys Val Ile Leu Asp Lys Tyr

50 55 60

Tyr Phe Leu Cys Gly Gln Pro Leu His Phe Ile Pro Arg Lys Gln

65 70 75

Leu Cys Asp Gly Glu Leu Asp Cys Pro Leu Gly Glu Asp Glu Glu

80 85 90

His Cys Val Lys Ser Phe Pro Glu Gly Pro Ala Val Ala Val Arg

95 100 105

Leu Ser Lys Asp Arg Ser Thr Leu Gln Val Leu Asp Ser Ala Thr

110 115 120

Gly Asn Trp Phe Ser Ala Cys Phe Asp Asn Phe Thr Glu Ala Leu

125 130 135

Ala Glu Thr Ala Cys Arg Gln Met Gly Tyr Ser Arg Ala Val Glu

140 145 150

Ile Gly Pro Asp Gln Asp Leu Asp Val Val Glu Ile Thr Glu Asn

155 160 165

Ser Gln Glu Leu Arg Met Arg Asn Ser Ser Gly Pro Cys Leu Ser

170 175 180

Gly Ser Leu Val Ser Leu His Cys Leu Ala Cys Gly Lys Ser Leu

185 190 195

Lys Thr Pro Arg Val Val Gly Gly Glu Glu Ala Ser Val Asp Ser

200 205 210

Trp Pro Trp Gln Val Ser Ile Gln Tyr Asp Lys Gln His Val Cys

215 220 225

Sequence Listing - P3230R1C1.txt

Gly Gly Ser Ile Leu Asp Pro His Trp Val Leu Thr Ala Ala His  
230 235 240

Cys Phe Arg Lys His Thr Asp Val Phe Asn Trp Lys Val Arg Ala  
245 250 255

Gly Ser Asp Lys Leu Gly Ser Phe Pro Ser Leu Ala Val Ala Lys  
260 265 270

Ile Ile Ile Ile Glu Phe Asn Pro Met Tyr Pro Lys Asp Asn Asp  
275 280 285

Ile Ala Leu Met Lys Leu Gln Phe Pro Leu Thr Phe Ser Gly Thr  
290 295 300

Val Arg Pro Ile Cys Leu Pro Phe Phe Asp Glu Glu Leu Thr Pro  
305 310 315

Ala Thr Pro Leu Trp Ile Ile Gly Trp Gly Phe Thr Lys Gln Asn  
320 325 330

Gly Gly Lys Met Ser Asp Ile Leu Leu Gln Ala Ser Val Gln Val  
335 340 345

Ile Asp Ser Thr Arg Cys Asn Ala Asp Asp Ala Tyr Gln Gly Glu  
350 355 360

Val Thr Glu Lys Met Met Cys Ala Gly Ile Pro Glu Gly Gly Val  
365 370 375

Asp Thr Cys Gln Gly Asp Ser Gly Gly Pro Leu Met Tyr Gln Ser  
380 385 390

Asp Gln Trp His Val Val Gly Ile Val Ser Trp Gly Tyr Gly Cys  
395 400 405

Gly Gly Pro Ser Thr Pro Gly Val Tyr Thr Lys Val Ser Ala Tyr  
410 415 420

Leu Asn Trp Ile Tyr Asn Val Trp Lys Ala Glu Leu  
425 430

<210> 113

<211> 1768

<212> DNA

<213> Homo Sapien

<400> 113

ggctggactg gaactcctgg tccaagtga tccacccgcc tcagcctccc 50

aaggtgctgt gattataggt gtaagccacc gtgtctggcc tctgaacaac 100

tttttcagca actaaaaaag ccacaggagt tgaactgcta ggattctgac 150

Sequence Listing - P3230R1C1.txt

tatgctgtgg tggctagtgc tcctactcct acctacatta aaatctgttt 200  
ttgtttctct tgtaactagc ctttaccttc ctaacacaga ggatctgtca 250  
ctgtggctct ggcccaaacc tgaccttcac tctggaacga gaacagaggt 300  
ttctaccac accgtcccct cgaagccggg gacagcctca ccttgctggc 350  
ctctcgctgg agcagtgtccc tcaccaactg tctcacgtct ggaggcactg 400  
actcgggcag tgcaggtagc tgagcctctt ggtagctgcg gctttcaagg 450  
tgggccttgc cctggccgta gaagggattg acaagcccga agatttcata 500  
ggcgatggct cccactgtccc aggcacagc cttgctgtag tcaatcactg 550  
ccctggggcc aggacgggccc gtggacacct gtcagaagc agtgggtgag 600  
acatcacgt gcccgccat ctaaccttt catgtcctgc acatcacctg 650  
atccatgggc taatctgaac tctgtccaa ggaaccaga gcttgagtga 700  
gctgtggctc agaccagaa ggggtctgct tagaccacct ggtttatgtg 750  
acaggacttg cattctctg gaacatgagg gaacgccgga ggaaagcaaa 800  
gtggcaggga aggaacttgt gccaaattat gggtcagaaa agatggaggt 850  
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ctgcaggccg atgtctcat cagccaggca gcagcaaaa tctgcatca 1050  
ccagccaggg gcagccgtct gggaaggagc aagcaaagt accattctc 1100  
ctcccctct tccctctgag aggccctct atgtccctac taaagccacc 1150  
agcaagacat agctgacagg ggctaattgg tcagtgttg cccaggaggt 1200  
cagcaaggcc tgagagctga tcagaaggc ctgctgtgcg aacacggaaa 1250  
tgcctccagt aagcacaggc tgcaaatcc ccaggcaaag gactgtgtgg 1300  
ctcaatttaa atcatgttct agtaattgga gctgtccca agaccaaagg 1350  
agctagagct tggttcaat gatctcaag ggccttata cccaggaga 1400  
ctttgatttg aatttgaaac cccaaatcca aacctaagaa ccagggtgat 1450  
taagaatcag ttattgccg gtgtggtggc ctgtaatgcc aacattttg 1500  
gaggccgagg cgggtagatc acctgaggtc aggagttcaa gaccagcctg 1550

Sequence Listing - P3230R1C1.txt

gccaacatgg tgaaccacct gtctctacta aaaatacaaa aaaactagcc 1600  
 aggcattggtg gtgtgtgcct gtatcccagc tactcgggag gctgagacag 1650  
 gagaattact tgaacctggg aggtgaagga ggctgagaca ggagaatcac 1700  
 ttcagcctga gcaacacagc gagactctgt ctcagaaaaa ataaaaaaag 1750  
 aattatgggtt atttgtaa 1768

<210> 114  
 <211> 109  
 <212> PRT  
 <213> Homo Sapien

<400> 114  
 Met Leu Trp Trp Leu Val Leu Leu Leu Leu Pro Thr Leu Lys Ser  
 1 5 10 15  
 Val Phe Cys Ser Leu Val Thr Ser Leu Tyr Leu Pro Asn Thr Glu  
 20 25 30  
 Asp Leu Ser Leu Trp Leu Trp Pro Lys Pro Asp Leu His Ser Gly  
 35 40 45  
 Thr Arg Thr Glu Val Ser Thr His Thr Val Pro Ser Lys Pro Gly  
 50 55 60  
 Thr Ala Ser Pro Cys Trp Pro Leu Ala Gly Ala Val Pro Ser Pro  
 65 70 75  
 Thr Val Ser Arg Leu Glu Ala Leu Thr Arg Ala Val Gln Val Ala  
 80 85 90  
 Glu Pro Leu Gly Ser Cys Gly Phe Gln Gly Gly Pro Cys Pro Gly  
 95 100 105  
 Arg Arg Arg Asp

<210> 115  
 <211> 1197  
 <212> DNA  
 <213> Homo Sapien

<400> 115  
 cagcagtggt ctctcagtc tctcaaagca aggaaagagt actgtgtgct 50  
 gagagaccat ggcaaagaat cctccagaga attgtgaaga ctgtcacatt 100  
 ctaaatgcag aagcttttaa atccaagaaa atatgtaaat cacttaagat 150  
 ttgtggactg gtgttttgta tcctggccct aactctaatt gtcctgtttt 200  
 gggggagcaa gcacttctgg ccggagggtac ccaaaaaagc ctatgacatg 250

Sequence Listing - P3230R1C1.txt

gagcacactt tctacagcaa tggagagaag aagaagattt acatggaaat 300  
tgatcctgtg accagaactg aaatattcag aagcggaat ggactgatg 350  
aaacattgga agtgcacgac tttaaaaacg gatacactgg catctacttc 400  
gtgggtcttc aaaatgttt tatcaaaact cagattaaag tgattcctga 450  
atcttctgaa ccagaagagg aaatagatga gaatgaagaa attaccacaa 500  
ctttcttga acagtcagt attgggtcc cagcagaaaa gcctattgaa 550  
aaccgagatt ttcttaaaaa ttccaaaatt ctggagattt gtgataacgt 600  
gaccatgtat tggatcaatc cacttcta atcagtttct gagttacaag 650  
actttgagga ggaggagaa gatcttctc ttctgccaa cgaaaaaaaa 700  
gggattgaac aaaatgaaca gtgggtggtc cctcaagtga aagtagagaa 750  
gacccgtcac gccagacaag caagtgagga agaactcca ataatgact 800  
atactgaaaa tggaatagaa ttgatcca tgctggatga gagaggttat 850  
tgttgatatt actgccgtcg aggcaaccgc tattgccgcc gcgtctgtga 900  
accttacta ggctactacc catatcata ctgctacca ggaggacgag 950  
tcactgtcg tgcatcatg ccttgtaact ggtgggtggc ccgcatgctg 1000  
gggaggggtc aataggaggt ttgagctcaa atgcttaaac tgctggcaac 1050  
atataataaa tgcattgctat tcaatgaatt tctgcctatg aggcattctg 1100  
ccctggtag ccagctctcc agaattactt gtaggtaatt cctctctca 1150  
tgttctaata aacttctaca ttatcaccaa aaaaaaaaaa aaaaaaa 1197

<210> 116

<211> 317

<212> PRT

<213> Homo Sapien

<400> 116

Met Ala Lys Asn Pro Pro Glu Asn Cys Glu Asp Cys His Ile Leu  
1 5 10 15

Asn Ala Glu Ala Phe Lys Ser Lys Lys Ile Cys Lys Ser Leu Lys  
20 25 30

Ile Cys Gly Leu Val Phe Gly Ile Leu Ala Leu Thr Leu Ile Val  
35 40 45

Leu Phe Trp Gly Ser Lys His Phe Trp Pro Glu Val Pro Lys Lys

Sequence Listing - P3230R1C1.txt

50	55	60
Ala Tyr Asp Met Glu His Thr Phe Tyr Ser Asn Gly Glu Lys Lys		
65	70	75
Lys Ile Tyr Met Glu Ile Asp Pro Val Thr Arg Thr Glu Ile Phe		
80	85	90
Arg Ser Gly Asn Gly Thr Asp Glu Thr Leu Glu Val His Asp Phe		
95	100	105
Lys Asn Gly Tyr Thr Gly Ile Tyr Phe Val Gly Leu Gln Lys Cys		
110	115	120
Phe Ile Lys Thr Gln Ile Lys Val Ile Pro Glu Phe Ser Glu Pro		
125	130	135
Glu Glu Glu Ile Asp Glu Asn Glu Glu Ile Thr Thr Thr Phe Phe		
140	145	150
Glu Gln Ser Val Ile Trp Val Pro Ala Glu Lys Pro Ile Glu Asn		
155	160	165
Arg Asp Phe Leu Lys Asn Ser Lys Ile Leu Glu Ile Cys Asp Asn		
170	175	180
Val Thr Met Tyr Trp Ile Asn Pro Thr Leu Ile Ser Val Ser Glu		
185	190	195
Leu Gln Asp Phe Glu Glu Glu Gly Glu Asp Leu His Phe Pro Ala		
200	205	210
Asn Glu Lys Lys Gly Ile Glu Gln Asn Glu Gln Trp Val Val Pro		
215	220	225
Gln Val Lys Val Glu Lys Thr Arg His Ala Arg Gln Ala Ser Glu		
230	235	240
Glu Glu Leu Pro Ile Asn Asp Tyr Thr Glu Asn Gly Ile Glu Phe		
245	250	255
Asp Pro Met Leu Asp Glu Arg Gly Tyr Cys Cys Ile Tyr Cys Arg		
260	265	270
Arg Gly Asn Arg Tyr Cys Arg Arg Val Cys Glu Pro Leu Leu Gly		
275	280	285
Tyr Tyr Pro Tyr Pro Tyr Cys Tyr Gln Gly Gly Arg Val Ile Cys		
290	295	300
Arg Val Ile Met Pro Cys Asn Trp Trp Val Ala Arg Met Leu Gly		
305	310	315
Arg Val		

Sequence Listing - P3230R1C1.txt

<210> 117

<211> 2121

<212> DNA

<213> Homo Sapien

<400> 117

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ggcagcttct cgcaggcggc agggcgggcg gccaggatca tgtccaccac 100  
cacatgccaa gtggtggcgt tcctcctgtc catcctgggg ctggccggct 150  
gcatcgcggc caccgggatg gacatgtgga gcaccagga cctgtacgac 200  
aaccctgtca cctccgtgtt ccagtacgaa gggctctgga ggagctgcgt 250  
gaggcagagt tcaggcttca ccgaatgcag gccctatttc accatcctgg 300  
gacttcagc catgctgcag gcagtgcgag ccctgatgat cgtaggcata 350  
gtcctgggtg ccattggcct cctggtatcc atctttgccc tgaaatgcat 400  
ccgcattggc agcatggagg actctgcaa agccaacatg aactgacct 450  
ccgggatcat gttcattgtc tcaggctttt gtgcaattgc tggagtgtct 500  
gtgtttgcca acatgctggt gactaacttc tggatgtcca cagctaaca 550  
gtacaccggc atgggtggga tgggtcagac tgttcagacc aggtacacat 600  
ttggtgcggc tctgttcgtg ggctgggtcg ctggaggcct cacactaatt 650  
gggggtgtga tgatgtgcat cgctgccgg ggctggcac cagaagaaac 700  
caactacaaa gccgtttctt atcatgcctc aggccacagt gttgcctaca 750  
agcctggagg cttcaaggcc agcactggct ttgggtccaa caccaaaaac 800  
aagaagatat acgatggagg tgcccgaca gaggacgagg tacaatctta 850  
tccttccaag cagactatg tgtaatgctc taagacctct cagcacgggc 900  
ggaagaaaact cccggagagc tcacccaaaa aacaaggaga tcccatctag 950  
atttcttctt gcttttgact cacagctgga agttagaaaa gcctcgattt 1000  
catctttgga gaggccaaat ggtcttagcc tcagtctctg tctctaaata 1050  
ttccaccata aaacagctga gttatttatg aattagaggc tatagctcac 1100  
atttcaatc ctctatttct tttttaaat ataactttct actctgatga 1150  
gagaatgtgg tttaatctc tctctacat tttgatgatt tagacagact 1200



Sequence Listing - P3230R1C1.txt

ccccctcttc ctccagtagtca ataaacccat tgatgatcta tttcccagct 1250  
tatccccaag aaaacttttg aaaggaaaga gtagaccxaa agatgttatt 1300  
ttctgctgtt tgaattttgt ctccccaccc ccaacttggc tagtaataaa 1350  
cacttactga agaagaagca ataagagaaa gatatttgta atctctccag 1400  
cccatgatct cggttttctt aactgtgat cttaaaagtt accaaaccaa 1450  
agtcattttc agtttgaggc aaccaaacct ttctactgct gttgacatct 1500  
tcttattaca gcaacaccat tctaggagtt tcctgagctc tccactggag 1550  
tcctctttct gtcgcgggtc agaaattgct cctagatgaa tgagaaaatt 1600  
atTTTTTTta atttaagtcc taaatatagt taaaataaat aatgttttag 1650  
taaaatgata cactatctct gtgaaatagc ctcacccta catgtggata 1700  
gaaggaaatg aaaaaataat tgctttgaca ttgtctatat ggtactttgt 1750  
aaagtcatgc ttaagtacaa attccatgaa aagctcacac ctgtaatcct 1800  
agcactttgg gaggctgagg aggaaggatc acttgagccc agaagttcga 1850  
gactagcctg ggcaacatgg agaagccctg tctctacaaa atacagagag 1900  
aaaaaatcag ccagtcatgg tggcatcac ctgtagtccc agcattccgg 1950  
gaggctgagg tgggaggatc acttgagccc agggagggtg gggctgcagt 2000  
gagccatgat cacaccactg cactccagcc aggtgacata gcgagatcct 2050  
gtctaaaaaa ataaaaaata aataatggaa cacagcaagt cctaggaagt 2100  
agggtaaaac taattcttta a 2121

<210> 118

<211> 261

<212> PRT

<213> Homo Sapien

<400> 118

Met Ser Thr Thr Thr Cys Gln Val Val Ala Phe Leu Leu Ser Ile  
1 5 10 15

Leu Gly Leu Ala Gly Cys Ile Ala Ala Thr Gly Met Asp Met Trp  
20 25 30

Ser Thr Gln Asp Leu Tyr Asp Asn Pro Val Thr Ser Val Phe Gln  
35 40 45

Tyr Glu Gly Leu Trp Arg Ser Cys Val Arg Gln Ser Ser Gly Phe  
50 55 60

Sequence Listing - P3230R1C1.txt

Thr Glu Cys Arg Pro Tyr Phe Thr Ile Leu Gly Leu Pro Ala Met  
65 70 75

Leu Gln Ala Val Arg Ala Leu Met Ile Val Gly Ile Val Leu Gly  
80 85 90

Ala Ile Gly Leu Leu Val Ser Ile Phe Ala Leu Lys Cys Ile Arg  
95 100 105

Ile Gly Ser Met Glu Asp Ser Ala Lys Ala Asn Met Thr Leu Thr  
110 115 120

Ser Gly Ile Met Phe Ile Val Ser Gly Leu Cys Ala Ile Ala Gly  
125 130 135

Val Ser Val Phe Ala Asn Met Leu Val Thr Asn Phe Trp Met Ser  
140 145 150

Thr Ala Asn Met Tyr Thr Gly Met Gly Gly Met Val Gln Thr Val  
155 160 165

Gln Thr Arg Tyr Thr Phe Gly Ala Ala Leu Phe Val Gly Trp Val  
170 175 180

Ala Gly Gly Leu Thr Leu Ile Gly Gly Val Met Met Cys Ile Ala  
185 190 195

Cys Arg Gly Leu Ala Pro Glu Glu Thr Asn Tyr Lys Ala Val Ser  
200 205 210

Tyr His Ala Ser Gly His Ser Val Ala Tyr Lys Pro Gly Gly Phe  
215 220 225

Lys Ala Ser Thr Gly Phe Gly Ser Asn Thr Lys Asn Lys Lys Ile  
230 235 240

Tyr Asp Gly Gly Ala Arg Thr Glu Asp Glu Val Gln Ser Tyr Pro  
245 250 255

Ser Lys His Asp Tyr Val  
260

<210> 119

<211> 2010

<212> DNA

<213> Homo Sapien

<400> 119

ggaaaaactg ttcttctctg tggcacagag aaccctgctt caaagcagaa 50

gtagcagttc cggagtcag ctggctaataa ctcacccag aggataatgg 100

caacccatgc ctagaaatc gctgggctgt ttcttggtgg tgttgaatg 150

Sequence Listing - P3230R1C1.txt

gtgggcacag tggctgtcac tgtcatgcct cagtggagag tgcggcctt 200  
cattgaaaac aacatcgtgg ttttgaaaa ctctgggaa ggactgtgga 250  
tgaattgcgt gaggcaggct aacatcagga tgcagtgcaa aatctatgat 300  
tccttgctgg ctctttctcc ggacctacag gcagccagag gactgatgtg 350  
tgctgcttcc gtgatgtcct tcttggcttt catgatggcc atccttgga 400  
tgaaatgcac caggtgcacg ggggacaatg agaaggtgaa ggctcacatt 450  
ctgctgacgg ctggaatcat cttcatcatc acgggcatgg tggtgctcat 500  
ccctgtgagc tgggttgcca atgccatcat cagagatttc tataactcaa 550  
tagtgaatgt tgcccaaaaa cgtgagcttg gagaagctct ctacttagga 600  
tggaccacgg cactggtgct gattgttggg ggagctctgt tctgctgcgt 650  
ttttgttgc aacgaaaaga gcagtagcta cagatactcg ataccttccc 700  
atgcacaac ccaaaaaagt tatcacaccg gaaagaagtc accgagcgtc 750  
tactccagaa gtcagtatgt gtagttgtgt atgtttttt aactttacta 800  
taaagccatg caaatgacaa aaatctatat tactttctca aaatggaccc 850  
caaagaaact ttgatttact gttcttaact gcctaacttt aattacagga 900  
actgtgcatc agctatttat gattctataa gctatttcag cagaatgaga 950  
tattaaacc aatgctttga ttgttctaga aagtatagta attgttttc 1000  
taagggtggt caagcatcta ctcttttat catttacttc aaaatgacat 1050  
tgctaaagac tgcattattt tactactgta atttctccac gacatagcat 1100  
tatgtacata gatgagtgtg acatttatat ctacataga gacatgctta 1150  
tatggtttta tttaaaatga aatgccagtc cattacactg aataaataga 1200  
actcaactat tgcttttcag ggaaatcatg gatagggttg aagaaggta 1250  
ctattaattg tttaaaaaca gcttagggat taatgtcttc catttataat 1300  
gaagattaaa atgaaggctt taatcagcat tgtaaaggaa attgaatggc 1350  
tttctgatat gctgtttttt agcctaggag ttagaaatcc taacttcttt 1400  
atcctcttct cccagaggct tttttttct tgtgtattaa attaacattt 1450  
ttaaaacgca gatattttgt caaggggctt tgcattcaaa ctgcttttcc 1500  
agggctatac tcagaagaaa gataaaagtg tgatctaaga aaaagtgatg 1550

Sequence Listing - P3230R1C1.txt

gttttaggaa agtgaaaata tttttgtttt tgtatttgaa gaagaatgat 1600  
gcattttgac aagaaatcat atatgtatgg atatatttta ataagtattt 1650  
gagtacagac tttagggttt catcaatata aataaaagag cagaaaaata 1700  
tgtcttggtt ttcatttgct taccaaaaaa acaacaacaa aaaaagttgt 1750  
ccttgagaa cttcacctgc tcctatgtgg gtacctgagt caaaattgtc 1800  
attttgttc tgtgaaaaat aaatttcctt cttgtaccat ttctgtttag 1850  
ttttactaaa atctgtaaact actgtatttt tctgtttatt ccaaatttga 1900  
tgaaactgac aatccaattt gaaagtttgt gtcgacgtct gtctagctta 1950  
aatgaatgtg ttctatttgc ttatacatt tatattaata aattgtacat 2000  
ttttctaatt 2010

<210> 120

<211> 225

<212> PRT

<213> Homo Sapien

<400> 120

Met	Ala	Thr	His	Ala	Leu	Glu	Ile	Ala	Gly	Leu	Phe	Leu	Gly	Gly
1				5				10					15	
Val	Gly	Met	Val	Gly	Thr	Val	Ala	Val	Thr	Val	Met	Pro	Gln	Trp
			20				25						30	
Arg	Val	Ser	Ala	Phe	Ile	Glu	Asn	Asn	Ile	Val	Val	Phe	Glu	Asn
			35				40						45	
Phe	Trp	Glu	Gly	Leu	Trp	Met	Asn	Cys	Val	Arg	Gln	Ala	Asn	Ile
			50				55						60	
Arg	Met	Gln	Cys	Lys	Ile	Tyr	Asp	Ser	Leu	Leu	Ala	Leu	Ser	Pro
			65				70						75	
Asp	Leu	Gln	Ala	Ala	Arg	Gly	Leu	Met	Cys	Ala	Ala	Ser	Val	Met
			80				85						90	
Ser	Phe	Leu	Ala	Phe	Met	Met	Ala	Ile	Leu	Gly	Met	Lys	Cys	Thr
			95				100						105	
Arg	Cys	Thr	Gly	Asp	Asn	Glu	Lys	Val	Lys	Ala	His	Ile	Leu	Leu
			110				115						120	
Thr	Ala	Gly	Ile	Ile	Phe	Ile	Ile	Thr	Gly	Met	Val	Val	Leu	Ile
			125				130						135	
Pro	Val	Ser	Trp	Val	Ala	Asn	Ala	Ile	Ile	Arg	Asp	Phe	Tyr	Asn

Sequence Listing - P3230R1C1.txt

140	145	150
Ser Ile Val Asn Val Ala Gln Lys Arg Glu Leu Gly Glu Ala Leu		
155	160	165
Tyr Leu Gly Trp Thr Thr Ala Leu Val Leu Ile Val Gly Gly Ala		
170	175	180
Leu Phe Cys Cys Val Phe Cys Cys Asn Glu Lys Ser Ser Ser Tyr		
185	190	195
Arg Tyr Ser Ile Pro Ser His Arg Thr Thr Gln Lys Ser Tyr His		
200	205	210
Thr Gly Lys Lys Ser Pro Ser Val Tyr Ser Arg Ser Gln Tyr Val		
215	220	225

<210> 121  
 <211> 1257  
 <212> DNA  
 <213> Homo Sapien

<400> 121  
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 cggagcgcgg cggagccaga cgctgaccac gttcctctcc tcggtctcct 100  
 ccgcctccag ctccgcgctg cccggcagcc gggagccatg cgaccccagg 150  
 gccccgccgc ctccccgcag cggctccgcg gcctctgtct gctcctgtctg 200  
 ctgcagctgc ccgcgccgtc gagcgcctct gagatcccca aggggaagca 250  
 aaaggcgcag ctccggcaga gggaggtggt ggacctgtat aatggaatgt 300  
 gcttacaagg gccagcagga gtgcctggtc gagacgggag ccctggggcc 350  
 aatgttattc cgggtacacc tgggatccca ggtcgggatg gattcaaagg 400  
 agaaaagggg gaatgtctga gggaaagctt tgaggagtcc tggacacca 450  
 actacaagca gtgttcatgg agttcattga attatggcat agatcttggg 500  
 aaaattgcgg agtgtacatt tacaagatg cgttcaaata gtgctctaag 550  
 agttttgttc agtggctcac ttcggctaaa atgcagaaat gcatgctgtc 600  
 agcgttggtg tttcacattc aatggagctg aatgttcagg acctcttccc 650  
 attgaagcta taatttattt ggaccaagga agccctgaaa tgaattcaac 700  
 aattaatatt catcgcactt cttctgtgga aggactttgt gaaggaattg 750  
 gtgctggatt agtggatggt gctatctggg ttggcacttg ttcagattac 800

Sequence Listing - P3230R1C1.txt

ccaaaaggag atgcttctac tggatggaat tcagtttctc gcatcattat 850

tgaagaacta ccaaataaaa tgctttaatt ttcatttgct acctctttt 900

ttattatgcc ttggaatggt tcacttaaat gacattttaa ataagttat 950  
gtatacatct gaatgaaaag caaagctaaa tatgtttaca gaccaaagt 1000

tgattcaca ctgtttttaa atctagcatt attcatttg cttcaatcaa 1050

aagtggtttc aatattttt ttagttgggt agaatactt cttcatagtc 1100

acattctctc aacctataat ttggaatatt gttgtggtct tttgtttt 1150

ctcttagtat agcattttta aaaaaatata aaagctacca atctttgtac 1200

aatttgtaaa tgtaagaat ttttttata tctgttaaataaaaaattatt 1250

tccaaca 1257

<210> 122

<211> 243

<212> PRT

<213> Homo Sapien

<400> 122

Met Arg Pro Gln Gly Pro Ala Ala Ser Pro Gln Arg Leu Arg Gly  
1 5 10 15

Leu Leu Leu Leu Leu Leu Gln Leu Pro Ala Pro Ser Ser Ala  
20 25 30

Ser Glu Ile Pro Lys Gly Lys Gln Lys Ala Gln Leu Arg Gln Arg  
35 40 45

Glu Val Val Asp Leu Tyr Asn Gly Met Cys Leu Gln Gly Pro Ala  
50 55 60

Gly Val Pro Gly Arg Asp Gly Ser Pro Gly Ala Asn Val Ile Pro  
65 70 75

Gly Thr Pro Gly Ile Pro Gly Arg Asp Gly Phe Lys Gly Glu Lys  
80 85 90

Gly Glu Cys Leu Arg Glu Ser Phe Glu Glu Ser Trp Thr Pro Asn  
95 100 105

Tyr Lys Gln Cys Ser Trp Ser Ser Leu Asn Tyr Gly Ile Asp Leu  
110 115 120

Gly Lys Ile Ala Glu Cys Thr Phe Thr Lys Met Arg Ser Asn Ser  
125 130 135

Ala Leu Arg Val Leu Phe Ser Gly Ser Leu Arg Leu Lys Cys Arg  
140 145 150

Sequence Listing - P3230R1C1.txt

Asn	Ala	Cys	Cys	Gln	Arg	Trp	Tyr	Phe	Thr	Phe	Asn	Gly	Ala	Glu
	155					160					165			
Cys	Ser	Gly	Pro	Leu	Pro	Ile	Glu	Ala	Ile	Ile	Tyr	Leu	Asp	Gln
	170					175					180			
Gly	Ser	Pro	Glu	Met	Asn	Ser	Thr	Ile	Asn	Ile	His	Arg	Thr	Ser
	185					190					195			
Ser	Val	Glu	Gly	Leu	Cys	Glu	Gly	Ile	Gly	Ala	Gly	Leu	Val	Asp
	200					205					210			
Val	Ala	Ile	Trp	Val	Gly	Thr	Cys	Ser	Asp	Tyr	Pro	Lys	Gly	Asp
	215					220				225				
Ala	Ser	Thr	Gly	Trp	Asn	Ser	Val	Ser	Arg	Ile	Ile	Ile	Glu	Glu
	230					235				240				

Leu Pro Lys

<210> 123

<211> 2379

<212> DNA

<213> Homo Sapien

<400> 123

gctgagcgtg tgcgcggtac ggggctctcc tgccttctgg gctccaacgc 50

agctctgtgg ctgaactggg tgctcatcac gggaactgct gggctatgga 100

atacagatgt ggcagctcag gtagccccaa attgcctgga agaatacatc 150

atgtttttcg ataagaagaa attgtaggat ccagtttttt tttaaccgc 200

cccccccca cccccaaaa aaactgtaaa gatgcaaaaa cgtaatatcc 250

atgaagatcc tattacctag gaagattttg atgttttgct gcgaatgcgg 300

tgttgggatt tatttgttct tggagtgttc tgcgtggctg gcaaagaata 350

atgttccaaa atcgggtccat ctccaagggt gtccaatttt tcttctggg 400

tgtcagcgag ccctgactca ctacagtgc gctgacagg gctgtcatgc 450

aactggcccc taagccaaag caaaagacct aaggacgacc ttgaacaat 500

acaaaggatg ggtttcaatg taattaggct actgagcgga tcagctgtag 550

cactgggtat agccccact gtcttactga caatgcttc ttctgccgaa 600

cgaggatgcc ctaagggtgt taggtgtgaa ggcaaatgg tatattgtga 650

atctcagaaa ttacaggaga taccctcaag tatatctgct gggtgcttag 700

Sequence Listing - P3230R1C1.txt

gtttgtccct tcgctataac agccttcaaa aacttaagta taatcaattt 750  
aaagggctca accagctcac ctggctatac cttgaccata accatatcag 800  
caatattgac gaaaatgctt ttaatggaat acgcagactc aaagagctga 850  
ttcttagttc caatagaatc tcctattttc ttaacaatac cttcagacct 900  
gtgacaaatt tacggaactt ggatctgtcc tataatcagc tgcattctct 950  
gggatctgaa cagtttcggg gcttgcgga gctgctgagt ttacatttac 1000  
ggcttaactc cctgagaacc atccctgtgc gaatattcca agactgccgc 1050  
aacctggaac ttttggacct gggatataac cggatccgaa gtttagccag 1100  
gaatgtcttt gctggcatga tcagactcaa agaacttcac ctggagcaca 1150  
atcaattttc caagctcaac ctggcccttt ttccaagggtt ggtcagcctt 1200  
cagaaccttt acttgacgtg gaataaaatc agtgtcatag gacagacat 1250  
gtcttgacc tggagctcct taaaaggct tgatttatca ggcaatgaga 1300  
tcgaagcttt cagtggacct agtgttttcc agtgtgtccc gaatctgcag 1350  
cgctcaacc tggattcaa caagctcaca ttattggtc aagagatttt 1400  
ggattcttgg atatccctca atgacatcag tcttgctggg aatatatggg 1450  
aatgcagcag aaatatgtgc tcccttgtaa actggctgaa aagttttaa 1500  
ggctaaaggg agaatacaat tatctgtgcc agtcccaaag agctgcaagg 1550  
agtaaagtgt atcgatgcag tgaagaacta cagcatctgt ggcaaaagta 1600  
ctacagagag gtttgatctg gccagggtc tcccaaagcc gacgtttaag 1650  
cccaagctcc ccaggccgaa gcatgagagc aaacccctt tgccccgac 1700  
gggtgggagcc acagagcccg gccagagac cgatgctgac gccgagcaca 1750  
tctctttcca taaaatcatc gcgggcagcg tggcgctttt cctgtccgtg 1800  
ctcgtcatcc tgctggttat ctacgtgtca tggaagcggg accctgcgag 1850  
catgaagcag ctgcagcagc gctccctcat gcgaaggcac aggaaaaaga 1900  
aaagacagtc cctaaagcaa atgactcca gcaccagga attttatgta 1950  
gattataaac ccaccaacac ggagaccagc gagatgctgc tgaatgggac 2000  
gggacctgc acctataaca aatcgggctc caggagtggt gaggtatgaa 2050  
ccattgtgat aaaaagagct cttaaagct gggaaataag tgggtgctta 2100



Sequence Listing - P3230R1C1.txt

ttgaactctg gtgactatca agggaacgcg atgcccccc tcccttccc 2150

tctccctctc actttggtgg caagatcctt ccttgccgt tttagtgc 2200

tcataatact ggtcattttc ctctataca taatcaaccc attgaaattt 2250

aaataccaca atcaatgtga agcttgaact cgggttaat ataataccta 2300

ttgtataaga ccctttactg attccattaa tgcgcattt gttttaagat 2350

aaaacttctt tcataggtaa aaaaaaaaa 2379

<210> 124

<211> 513

<212> PRT

<213> Homo Sapien

<400> 124

Met Gly Phe Asn Val Ile Arg Leu Leu Ser Gly Ser Ala Val Ala

1 5 10 15

Leu Val Ile Ala Pro Thr Val Leu Leu Thr Met Leu Ser Ser Ala

20 25 30

Glu Arg Gly Cys Pro Lys Gly Cys Arg Cys Glu Gly Lys Met Val

35 40 45

Tyr Cys Glu Ser Gln Lys Leu Gln Glu Ile Pro Ser Ser Ile Ser

50 55 60

Ala Gly Cys Leu Gly Leu Ser Leu Arg Tyr Asn Ser Leu Gln Lys

65 70 75

Leu Lys Tyr Asn Gln Phe Lys Gly Leu Asn Gln Leu Thr Trp Leu

80 85 90

Tyr Leu Asp His Asn His Ile Ser Asn Ile Asp Glu Asn Ala Phe

95 100 105

Asn Gly Ile Arg Arg Leu Lys Glu Leu Ile Leu Ser Ser Asn Arg

110 115 120

Ile Ser Tyr Phe Leu Asn Asn Thr Phe Arg Pro Val Thr Asn Leu

125 130 135

Arg Asn Leu Asp Leu Ser Tyr Asn Gln Leu His Ser Leu Gly Ser

140 145 150

Glu Gln Phe Arg Gly Leu Arg Lys Leu Leu Ser Leu His Leu Arg

155 160 165

Ser Asn Ser Leu Arg Thr Ile Pro Val Arg Ile Phe Gln Asp Cys

170 175 180

Arg Asn Leu Glu Leu Leu Asp Leu Gly Tyr Asn Arg Ile Arg Ser

185 190 195

# Sequence Listing - P3230R1C1.txt

Leu Ala Arg Asn Val Phe Ala Gly Met Ile Arg Leu Lys Glu Leu  
200 205 210

His Leu Glu His Asn Gln Phe Ser Lys Leu Asn Leu Ala Leu Phe  
215 220 225

Pro Arg Leu Val Ser Leu Gln Asn Leu Tyr Leu Gln Trp Asn Lys  
230 235 240

Ile Ser Val Ile Gly Gln Thr Met Ser Trp Thr Trp Ser Ser Leu  
245 250 255

Gln Arg Leu Asp Leu Ser Gly Asn Glu Ile Glu Ala Phe Ser Gly  
260 265 270

Pro Ser Val Phe Gln Cys Val Pro Asn Leu Gln Arg Leu Asn Leu  
275 280 285

Asp Ser Asn Lys Leu Thr Phe Ile Gly Gln Glu Ile Leu Asp Ser  
290 295 300

Trp Ile Ser Leu Asn Asp Ile Ser Leu Ala Gly Asn Ile Trp Glu  
305 310 315

Cys Ser Arg Asn Ile Cys Ser Leu Val Asn Trp Leu Lys Ser Phe  
320 325 330

Lys Gly Leu Arg Glu Asn Thr Ile Ile Cys Ala Ser Pro Lys Glu  
335 340 345

Leu Gln Gly Val Asn Val Ile Asp Ala Val Lys Asn Tyr Ser Ile  
350 355 360

Cys Gly Lys Ser Thr Thr Glu Arg Phe Asp Leu Ala Arg Ala Leu  
365 370 375

Pro Lys Pro Thr Phe Lys Pro Lys Leu Pro Arg Pro Lys His Glu  
380 385 390

Ser Lys Pro Pro Leu Pro Pro Thr Val Gly Ala Thr Glu Pro Gly  
395 400 405

Pro Glu Thr Asp Ala Asp Ala Glu His Ile Ser Phe His Lys Ile  
410 415 420

Ile Ala Gly Ser Val Ala Leu Phe Leu Ser Val Leu Val Ile Leu  
425 430 435

Leu Val Ile Tyr Val Ser Trp Lys Arg Tyr Pro Ala Ser Met Lys  
440 445 450

Gln Leu Gln Gln Arg Ser Leu Met Arg Arg His Arg Lys Lys Lys  
455 460 465

Sequence Listing - P3230R1C1.txt

Arg Gln Ser Leu Lys Gln Met Thr Pro Ser Thr Gln Glu Phe Tyr  
470 475 480

Val Asp Tyr Lys Pro Thr Asn Thr Glu Thr Ser Glu Met Leu Leu  
485 490 495

Asn Gly Thr Gly Pro Cys Thr Tyr Asn Lys Ser Gly Ser Arg Glu  
500 505 510

Cys Glu Val

<210> 125

<211> 998

<212> DNA

<213> Homo Sapien

<400> 125

ccgttatcgt cttgcgctac tgctgaatgt ccgtcccga ggaggaggag 50  
aggcttttgc cgctgacca gagatggccc cgagcgagca aattcctact 100  
gtccggctgc gcggtaccg tggccgagct agcaaccttt ccctggatc 150  
tcacaaaaac tcgactcaa atgcaaggag aagcagctct tgctcggttg 200  
ggagacggtg caagagaatc tgccccctat aggggaatgg tgcgcacagc 250  
cctagggatc attgaagagg aaggctttct aaagctttgg caaggagtga 300  
cacccgccat ttacagacac gtagtgtatt ctggagggtcg aatggtcaca 350  
tatgaacatc tccgagaggt tgtgtttggc aaaagtgaag atgagcatta 400  
tcccctttgg aaatcagtca ttggagggat gatggctggt gttattggcc 450  
agtttttagc caatccaact gacctagtga aggttcagat gcaaatggaa 500  
ggaaaaagga aactggaagg aaaaccattg cgatttcgtg gtgtacatca 550  
tgcatttgca aaaatcttag ctgaaggagg aatacgaggg ctttgggcag 600  
gctgggtacc caatatacaa agagcagcac tggatgaat gggagattta 650  
accacttatg atacagtga aactacttg gtattgaata caccacttga 700  
ggacaatatc atgactcacg gtttatcaag tttatgttct ggactggtag 750  
cttctattct gggaacacca gccgatgtca tcaaaagcag aataatgaat 800  
caaccacgag ataaacaagg aaggggactt ttgtataaat catcgactga 850  
ctgcttgatt caggctgttc aaggtgaagg attcatgagt ctatataaag 900  
gctttttacc atcttggctg agaatgaccc cttgggtcaat ggtgttctgg 950

Sequence Listing - P3230R1C1.txt

cttacttatg aaaaaatcag agagatgagt ggagtcagtc cattttaa 998

<210> 126

<211> 323

<212> PRT

<213> Homo Sapien

<400> 126

Met Ser Val Pro Glu Glu Glu Arg Leu Leu Pro Leu Thr Gln  
1 5 10 15

Arg Trp Pro Arg Ala Ser Lys Phe Leu Leu Ser Gly Cys Ala Ala  
20 25 30

Thr Val Ala Glu Leu Ala Thr Phe Pro Leu Asp Leu Thr Lys Thr  
35 40 45

Arg Leu Gln Met Gln Gly Glu Ala Ala Leu Ala Arg Leu Gly Asp  
50 55 60

Gly Ala Arg Glu Ser Ala Pro Tyr Arg Gly Met Val Arg Thr Ala  
65 70 75

Leu Gly Ile Ile Glu Glu Glu Gly Phe Leu Lys Leu Trp Gln Gly  
80 85 90

Val Thr Pro Ala Ile Tyr Arg His Val Val Tyr Ser Gly Gly Arg  
95 100 105

Met Val Thr Tyr Glu His Leu Arg Glu Val Val Phe Gly Lys Ser  
110 115 120

Glu Asp Glu His Tyr Pro Leu Trp Lys Ser Val Ile Gly Gly Met  
125 130 135

Met Ala Gly Val Ile Gly Gln Phe Leu Ala Asn Pro Thr Asp Leu  
140 145 150

Val Lys Val Gln Met Gln Met Glu Gly Lys Arg Lys Leu Glu Gly  
155 160 165

Lys Pro Leu Arg Phe Arg Gly Val His His Ala Phe Ala Lys Ile  
170 175 180

Leu Ala Glu Gly Gly Ile Arg Gly Leu Trp Ala Gly Trp Val Pro  
185 190 195

Asn Ile Gln Arg Ala Ala Leu Val Asn Met Gly Asp Leu Thr Thr  
200 205 210

Tyr Asp Thr Val Lys His Tyr Leu Val Leu Asn Thr Pro Leu Glu  
215 220 225

Asp Asn Ile Met Thr His Gly Leu Ser Ser Leu Cys Ser Gly Leu  
230 235 240

Sequence Listing - P3230R1C1.txt

Val Ala Ser Ile Leu Gly Thr Pro Ala Asp Val Ile Lys Ser Arg  
245 250 255

Ile Met Asn Gln Pro Arg Asp Lys Gln Gly Arg Gly Leu Leu Tyr  
260 265 270

Lys Ser Ser Thr Asp Cys Leu Ile Gln Ala Val Gln Gly Glu Gly  
275 280 285

Phe Met Ser Leu Tyr Lys Gly Phe Leu Pro Ser Trp Leu Arg Met  
290 295 300

Thr Pro Trp Ser Met Val Phe Trp Leu Thr Tyr Glu Lys Ile Arg  
305 310 315

Glu Met Ser Gly Val Ser Pro Phe  
320

<210> 127

<211> 1505

<212> DNA

<213> Homo Sapien

<400> 127

cgcggatcgg acccaagcag gtcggcggcg gcggcaggag agcggccggg 50

cgtcagctcc tcgacccccg tgtcgggcta gtccagcgag gcggacgggc 100

ggcgtggggc catggccagg cccggcatgg agcgggtggcg cgaccggctg 150

gcgctggtga cggggggcctc gggggggcatc ggcgcgggcg tggcccgggc 200

cctggtccag cagggactga aggtggtggg ctgcgcccgc actgtgggca 250

acatcgagga gctggctgct gaatgtaaga gtgcaggcta ccccgggact 300

ttgatcccct acagatgtga cctatcaaat gaagaggaca tcctctccat 350

gttctcagct atccgttctc agcacagcgg ttagacatc tgcataca 400

atgctggctt ggcccggcct gacaccctgc ttcaggcag caccagtgg 450

tggaaggaca tgttcaatgt gaacgtgctg gccctcagca tctgcacacg 500

ggaagcctac cagtccatga aggagcggaa tgtggacgat gggcacatca 550

ttaacatcaa tagcatgtct ggccaccgag tgttaccct gtctgtgacc 600

cacttctata gtgccaccaa gtatgccgtc actgcgctga cagagggact 650

gaggcaagag cttcgggagg ccagaccca catccgagcc acgtgcatct 700

ctccaggtgt ggtggagaca caattcgct tcaaactcca cgacaaggac 750

cctgagaagg cagctgccac ctatgagcaa atgaagtgtc tcaaaccgga 800

Sequence Listing - P3230R1C1.txt

ggatgtggcc gaggtgttta tctacgtcct cagcaccccc gcacacatcc 850  
 agattggaga catccagatg aggcccacgg agcaggtgac ctagtgactg 900  
 tgggagctcc tccttccctc cccacccttc atggcttgcc tcctgcctct 950  
 ggattttagg tgttgatttc tggatcacgg gataccactt cctgtccaca 1000  
 ccccgaccag gggctagaaa attgtttga gattttata tcatttgc 1050  
 aaattgcttc agttgtaa atgtgaaaaatg ggctggggaa aggaggtggt 1100  
 gtcctaatt gtttacttg ttaacttgtt cttgtgcccc tgggcacttg 1150  
 gccttgtct gctctcagtg tcttccctt gacatgggaa aggagttgtg 1200  
 gccaaaatcc ccattctt gacactcaac gtctgtggct cagggtggg 1250  
 gtggcagagg gaggccttca ccttatct gtgtgttat ccagggtcc 1300  
 agacttctc ctctgcctgc cccactgcac ccttcccc ttattctat 1350  
 ccttctggc tcccagccc agtcttggt tctgtcccc tctggggtc 1400  
 atccctcac tctgactctg actatggcag cagaacacca gggcctggcc 1450  
 cagtggattt catggtgatc attaaaaaag aaaaatcgca accaaaaaa 1500  
 aaaa 1505

<210> 128  
 <211> 260  
 <212> PRT  
 <213> Homo Sapien

<400> 128  
 Met Ala Arg Pro Gly Met Glu Arg Trp Arg Asp Arg Leu Ala Leu  
 1 5 10 15  
 Val Thr Gly Ala Ser Gly Gly Ile Gly Ala Ala Val Ala Arg Ala  
 20 25 30  
 Leu Val Gln Gln Gly Leu Lys Val Val Gly Cys Ala Arg Thr Val  
 35 40 45  
 Gly Asn Ile Glu Glu Leu Ala Ala Glu Cys Lys Ser Ala Gly Tyr  
 50 55 60  
 Pro Gly Thr Leu Ile Pro Tyr Arg Cys Asp Leu Ser Asn Glu Glu  
 65 70 75  
 Asp Ile Leu Ser Met Phe Ser Ala Ile Arg Ser Gln His Ser Gly  
 80 85 90  
 Val Asp Ile Cys Ile Asn Asn Ala Gly Leu Ala Arg Pro Asp Thr

Sequence Listing - P3230R1C1.txt

95	100	105
Leu Leu Ser Gly Ser Thr Ser Gly Trp Lys Asp Met Phe Asn Val		
110	115	120
Asn Val Leu Ala Leu Ser Ile Cys Thr Arg Glu Ala Tyr Gln Ser		
125	130	135
Met Lys Glu Arg Asn Val Asp Asp Gly His Ile Ile Asn Ile Asn		
140	145	150
Ser Met Ser Gly His Arg Val Leu Pro Leu Ser Val Thr His Phe		
155	160	165
Tyr Ser Ala Thr Lys Tyr Ala Val Thr Ala Leu Thr Glu Gly Leu		
170	175	180
Arg Gln Glu Leu Arg Glu Ala Gln Thr His Ile Arg Ala Thr Cys		
185	190	195
Ile Ser Pro Gly Val Val Glu Thr Gln Phe Ala Phe Lys Leu His		
200	205	210
Asp Lys Asp Pro Glu Lys Ala Ala Ala Thr Tyr Glu Gln Met Lys		
215	220	225
Cys Leu Lys Pro Glu Asp Val Ala Glu Ala Val Ile Tyr Val Leu		
230	235	240
Ser Thr Pro Ala His Ile Gln Ile Gly Asp Ile Gln Met Arg Pro		
245	250	255
Thr Glu Gln Val Thr		
260		

<210> 129

<211> 1177

<212> DNA

<213> Homo Sapien

<400> 129

aacttctaca tgggcctcct gctgctggtg ctcttctca gcctcctgcc 50

ggtggcctac accatcatgt cctcccacc ctctttgac tgcgggccgt 100

tcaggtgcag agtctcagtt gcccgaggag acctcccctc ccgaggcagt 150

ctgctcagag ggcctcggcc cagaattcca gttctggtt catgccagcc 200

tgtaaaaggc catggaactt tgggtgaatc accgatgcca ttaagaggg 250

tttctgccca ggatggaaat gtaggtcgt tctgtgtctg cgctgttcat 300

ttcagtagcc accagccacc tgtggccgtt gagtgcttga aatgaggaac 350

tgagaaaatt aatttctcat gtatttttct cattatttta ttaattttta 400

Sequence Listing - P3230R1C1.txt

actgatagtt gtacatattt gggggtacat gtgatatttg gatacatgta 450  
tacaatatat aatgatcaaa tcagggtaac tgggatatcc atcacatcaa 500  
acatttattt ttattcttt ttagacagag tctcactctg tcaccaggc 550  
tggagtgcag tgggtccatc tcagcttact gcaacctctg cctgccaggt 600  
tcaagcgatt ctcatgcctc cacctcccaa gtagctggga ctacaggcat 650  
gcaccacaat gcccaactaa tttttgtatt ttagtagag acgggggttt 700  
gccatgttg ccaggctggc ctggaactcc tggcctcaaa caatccactt 750  
gcctcggcct cccaaagtgt tatgattaca ggcgtgagcc accgtgcctg 800  
gcctaaacat ttatctttt ttgtgttg gaactttgaa attatacaat 850  
gaattattgt taactgtcat ctccctgctg tgctatggaa cactgggact 900  
tcttcctct atctaactgt atattgtac cagttaacca accgtacttc 950  
atccccactc ctctctatcc ttccaacct ctgatcacct cattctactc 1000  
tctacctca tgagatccac ttttttagct cccacatgtg agtaagaaaa 1050  
tgcaatattt gtctttctgt gcctggctta ttcacttaa cataatgact 1100  
tcctgttcca tccatgttg gcacaaatgac aggatttcgt tcttaatttc 1150  
aattaaaata accacacatg gcaaaaa 1177

<210> 130

<211> 111

<212> PRT

<213> Homo Sapien

<400> 130

Met Gly Leu Leu Leu Leu Val Leu Phe Leu Ser Leu Leu Pro Val  
1 5 10 15

Ala Tyr Thr Ile Met Ser Leu Pro Pro Ser Phe Asp Cys Gly Pro  
20 25 30

Phe Arg Cys Arg Val Ser Val Ala Arg Glu His Leu Pro Ser Arg  
35 40 45

Gly Ser Leu Leu Arg Gly Pro Arg Pro Arg Ile Pro Val Leu Val  
50 55 60

Ser Cys Gln Pro Val Lys Gly His Gly Thr Leu Gly Glu Ser Pro  
65 70 75

Met Pro Phe Lys Arg Val Phe Cys Gln Asp Gly Asn Val Arg Ser



Sequence Listing - P3230R1C1.txt

80 85 90

Phe Cys Val Cys Ala Val His Phe Ser Ser His Gln Pro Pro Val  
95 100 105

Ala Val Glu Cys Leu Lys  
110

<210> 131

<211> 2061

<212> DNA

<213> Homo Sapien

<400> 131

ttctgaagta acggaagcta ccttgataa agacctcaac actgctgacc 50

atgatcagcg cagcctggag catcttctc atcgggacta aaattgggct 100

gttccttcaa gtagcacctc tatcagttat ggctaaatcc tgtccatctg 150

tgtgtcgctg cgatgcgggt ttcatctact gtaatgatcg ctttctgaca 200

tccattcaa caggaatacc agaggatgct acaactctct acctcagaa 250

caaccaaata aataatgctg ggattcctc agatttgaac aacttgctga 300

aagtagaaag aatataccta taccacaaca gtttagatga atttctacc 350

aacctccaa agtatgtaaa agagttacat ttgcaagaaa ataacataag 400

gactatcact tatgattcac ttcaaaaat tcctatctg gaagaattac 450

atttagatga caactctgtc tctgcagtta gcatagaaga gggagcattc 500

cgagacagca actatctccg actgctttc ctgtcccgta atcaccttag 550

cacaattccc tggggtttgc ccaggactat agaagaacta cgcttgatg 600

ataatcgcat atccactatt tcataccat ctctcaagg tctcactagt 650

ctaaaacgcc tggttctaga tggaaacctg ttgaacaatc atgggttagg 700

tgacaaagt ttctcaacc tagttaattt gacagagctg tccctgggtg 750

ggaattccct gactgctgca ccagtaaacc ttccaggcac aaacctgagg 800

aagctttatc ttcaagataa ccacatcaat cgggtgcccc caaatgcttt 850

ttcttatcta aggcagctct atcgactgga tatgtccaat aataacctaa 900

gtaatttacc tcagggtatc ttgatgatt tggacaatat aacacaactg 950

attcttcga acaatccctg gtattgcggg tgcaagatga aatgggtacg 1000

tgactgggta caatcactac ctgtgaaggc caactgcgtg gggctcatgt 1050

Sequence Listing - P3230R1C1.txt

gccaaagcccc agaaaagggtt cgtgggatgg ctattaagga tctcaatgca 1100  
 gaactgtttg attgtaagga cagtgggatt gtaagcacca ttcagataac 1150  
 cactgcaata cccaacacag tgtatcctgc ccaaggacag tggccagctc 1200  
 cagtgaccaa acagccagat attaagaacc ccaagctcac taaggatcaa 1250  
 caaaccacag ggagtcctc aagaaaaaca attacaatta ctgtgaagtc 1300  
 tgtcacctct gataccattc atatctcttg gaaacttgct ctacctatga 1350  
 ctgctttgag actcagctgg cttaaactgg gccatagccc ggcatttgga 1400  
 tctataacag aaacaattgt aacaggggaa cgcagtgagt acttggtcac 1450  
 agccctggag cctgattcac cctataaagt atgcatgggt cccatggaaa 1500  
 ccagcaacct ctacctattt gatgaaactc ctgtttgtat tgagactgaa 1550  
 actgcacccc ttcgaatgta caaccctaca accaccctca atcgagagca 1600  
 agagaaagaa ccttacaaaa accccaattt acctttggct gccatcattg 1650  
 gtggggctgt ggccctgggt accattgccc ttcttgcttt agtgtgttg 1700  
 tatgttcata ggaatggatc gctcttctca aggaactgtg catatagcaa 1750  
 agggaggaga agaaaggatg actatgcaga agctggcact aagaaggaca 1800  
 actctatcct ggaaatcagg gaaacttctt ttcagatggt accaataagc 1850  
 aatgaacca tctcgaagga ggagtttga atacacacca tatttcctcc 1900  
 taatggaatg aatctgtaca aaaacaatca cagtgaaagc agtagtaacc 1950  
 gaagctacag agacagtggg attccagact cagatcactc acactcatga 2000  
 tgctgaagga ctacagcag acttggtttt tgggtttttt aaacctaagg 2050  
 gaggtgatgg t 2061

<210> 132  
 <211> 649  
 <212> PRT  
 <213> Homo Sapien

<400> 132  
 Met Ile Ser Ala Ala Trp Ser Ile Phe Leu Ile Gly Thr Lys Ile  
 1 5 10 15  
 Gly Leu Phe Leu Gln Val Ala Pro Leu Ser Val Met Ala Lys Ser  
 20 25 30

Sequence Listing - P3230R1C1.txt

Cys Pro Ser Val Cys Arg Cys Asp Ala Gly Phe Ile Tyr Cys Asn  
 35 40 45  
 Asp Arg Phe Leu Thr Ser Ile Pro Thr Gly Ile Pro Glu Asp Ala  
 50 55 60  
 Thr Thr Leu Tyr Leu Gln Asn Asn Gln Ile Asn Asn Ala Gly Ile  
 65 70 75  
 Pro Ser Asp Leu Lys Asn Leu Leu Lys Val Glu Arg Ile Tyr Leu  
 80 85 90  
 Tyr His Asn Ser Leu Asp Glu Phe Pro Thr Asn Leu Pro Lys Tyr  
 95 100 105  
 Val Lys Glu Leu His Leu Gln Glu Asn Asn Ile Arg Thr Ile Thr  
 110 115 120  
 Tyr Asp Ser Leu Ser Lys Ile Pro Tyr Leu Glu Glu Leu His Leu  
 125 130 135  
 Asp Asp Asn Ser Val Ser Ala Val Ser Ile Glu Glu Gly Ala Phe  
 140 145 150  
 Arg Asp Ser Asn Tyr Leu Arg Leu Leu Phe Leu Ser Arg Asn His  
 155 160 165  
 Leu Ser Thr Ile Pro Trp Gly Leu Pro Arg Thr Ile Glu Glu Leu  
 170 175 180  
 Arg Leu Asp Asp Asn Arg Ile Ser Thr Ile Ser Ser Pro Ser Leu  
 185 190 195  
 Gln Gly Leu Thr Ser Leu Lys Arg Leu Val Leu Asp Gly Asn Leu  
 200 205 210  
 Leu Asn Asn His Gly Leu Gly Asp Lys Val Phe Phe Asn Leu Val  
 215 220 225  
 Asn Leu Thr Glu Leu Ser Leu Val Arg Asn Ser Leu Thr Ala Ala  
 230 235 240  
 Pro Val Asn Leu Pro Gly Thr Asn Leu Arg Lys Leu Tyr Leu Gln  
 245 250 255  
 Asp Asn His Ile Asn Arg Val Pro Pro Asn Ala Phe Ser Tyr Leu  
 260 265 270  
 Arg Gln Leu Tyr Arg Leu Asp Met Ser Asn Asn Asn Leu Ser Asn  
 275 280 285  
 Leu Pro Gln Gly Ile Phe Asp Asp Leu Asp Asn Ile Thr Gln Leu  
 290 295 300  
 Ile Leu Arg Asn Asn Pro Trp Tyr Cys Gly Cys Lys Met Lys Trp

Sequence Listing - P3230R1C1.txt

305	310	315
Val Arg Asp Trp Leu Gln Ser Leu Pro Val Lys Val Asn Val Arg		
320	325	330
Gly Leu Met Cys Gln Ala Pro Glu Lys Val Arg Gly Met Ala Ile		
335	340	345
Lys Asp Leu Asn Ala Glu Leu Phe Asp Cys Lys Asp Ser Gly Ile		
350	355	360
Val Ser Thr Ile Gln Ile Thr Thr Ala Ile Pro Asn Thr Val Tyr		
365	370	375
Pro Ala Gln Gly Gln Trp Pro Ala Pro Val Thr Lys Gln Pro Asp		
380	385	390
Ile Lys Asn Pro Lys Leu Thr Lys Asp Gln Gln Thr Thr Gly Ser		
395	400	405
Pro Ser Arg Lys Thr Ile Thr Ile Thr Val Lys Ser Val Thr Ser		
410	415	420
Asp Thr Ile His Ile Ser Trp Lys Leu Ala Leu Pro Met Thr Ala		
425	430	435
Leu Arg Leu Ser Trp Leu Lys Leu Gly His Ser Pro Ala Phe Gly		
440	445	450
Ser Ile Thr Glu Thr Ile Val Thr Gly Glu Arg Ser Glu Tyr Leu		
455	460	465
Val Thr Ala Leu Glu Pro Asp Ser Pro Tyr Lys Val Cys Met Val		
470	475	480
Pro Met Glu Thr Ser Asn Leu Tyr Leu Phe Asp Glu Thr Pro Val		
485	490	495
Cys Ile Glu Thr Glu Thr Ala Pro Leu Arg Met Tyr Asn Pro Thr		
500	505	510
Thr Thr Leu Asn Arg Glu Gln Glu Lys Glu Pro Tyr Lys Asn Pro		
515	520	525
Asn Leu Pro Leu Ala Ala Ile Ile Gly Gly Ala Val Ala Leu Val		
530	535	540
Thr Ile Ala Leu Leu Ala Leu Val Cys Trp Tyr Val His Arg Asn		
545	550	555
Gly Ser Leu Phe Ser Arg Asn Cys Ala Tyr Ser Lys Gly Arg Arg		
560	565	570
Arg Lys Asp Asp Tyr Ala Glu Ala Gly Thr Lys Lys Asp Asn Ser		
575	580	585

Sequence Listing - P3230R1C1.txt

Ile Leu Glu Ile Arg Glu Thr Ser Phe Gln Met Leu Pro Ile Ser  
590 595 600

Asn Glu Pro Ile Ser Lys Glu Glu Phe Val Ile His Thr Ile Phe  
605 610 615

Pro Pro Asn Gly Met Asn Leu Tyr Lys Asn Asn His Ser Glu Ser  
620 625 630

Ser Ser Asn Arg Ser Tyr Arg Asp Ser Gly Ile Pro Asp Ser Asp  
635 640 645

His Ser His Ser

<210> 133

<211> 1882

<212> DNA

<213> Homo Sapien

<400> 133

ccgtcatccc cctgcagcca ccctccag agtccttgc ccaggccacc 50

ccaggcttct tggcagccct gccgggccac ttgtctcat gtctgccagg 100

gggaggtggg aaggaggtgg gaggagggcg tgcagaggca gtctgggctt 150

ggccagagct cagggtgctg agcgtgtgac cagcagttag cagaggccgg 200

ccatggccag cctggggctg ctgtctctgc tcttactgac agcactgcca 250

ccgctgtggt cctctcact gcctgggctg gacactgctg aaagtaaagc 300

caccattgca gacctgatcc tgtctgcgct ggagagagcc accgtcttcc 350

tagaacagag gctgcctgaa atcaacctgg atggcatggt ggggggtccga 400

gtgttggaag agcagctaaa aagtgtccgg gagaagtggg cccaggagcc 450

cctgtctgag ccgctgagcc tgcgctggg gatgctgggg gagaagctgg 500

aggctgccat ccagagatcc ctccactacc tcaagctgag tgatccaag 550

tacctaagag agttccagct gacctccag cccgggtttt ggaagctccc 600

acatgcctgg atccacactg atgcctcctt ggtgtacccc acgttcgggc 650

cccaggactc attctcagag gagagaagtg acgtgtgcct ggtgcagctg 700

ctgggaaccg ggacggacag cagcgagccc tgcggcctct cagacctctg 750

caggagcctc atgaccaagc ccggctgctc aggctactgc ctgtcccacc 800

aactgctctt cttcctctgg gccagaatga ggggatgcac acagggacca 850

Sequence Listing - P3230R1C1.txt

ctccaacaga gccaggacta tatcaacctc ttctgcgcca acatgatgga 900  
 cttgaaccgc agagctgagg ccatacgata cgcctaccct acccgggaca 950  
 tcttcattga aaacatcatg ttctgtggaa tgggcggctt ctccgacttc 1000  
 tacaagctcc ggtggctgga ggccattctc agctggcaga aacagcagga 1050  
 aggatgcttc ggggagcctg atgctgaaga tgaagaatta tctaaagcta 1100  
 ttcaatatca gcagcatttt tcgaggagag tgaagaggcg agaaaaacaa 1150  
 ttccagatt ctgctctgt tgctcaggct ggagtacagt ggcgcaatct 1200  
 cggctcactg caacctttgc ctctggggtt caagcaattc tcttgctca 1250  
 tctctccgag tagctgggac tacaggagcg tgccaccata cctggcta 1300  
 ttttatattt ttttagtaga gacagggtt catcatgttg ctcatgctgg 1350  
 tctcgaactc ctgatctcaa gagatccgcc cacctcaggc tcccaaagt 1400  
 tgggattata ggtgtgagcc accgtgtctg gctgaaaagc actttcaaag 1450  
 agactgtgtt gaataaaggg ccaaggttct tgccaccag cactcatggg 1500  
 ggctctctcc ctagatggc tgctctccc acaacacagc cacagcagt 1550  
 gcagccctgg gtggcttct atacatctg gcagaatacc cccagcaaa 1600  
 cagagagcca cacccatcca caccgccacc accaagcagc cgctgagacg 1650  
 gacggttcca tgccagctgc ctggaggagg aacagacccc ttagtcctc 1700  
 atcccttaga tcttgagggg cacggatcac atctgggaa gaaggcatct 1750  
 ggaggataag caaagccacc ccgacacca atcttgaag ccctgagtag 1800  
 gcagggccag ggtaggtggg ggccgggagg gaccaggtg tgaacggatg 1850  
 aataaagttc aactgcaact gaaaaaaaaa aa 1882

<210> 134

<211> 440

<212> PRT

<213> Homo Sapien

<400> 134

Met Ser Ala Arg Gly Arg Trp Glu Gly Gly Gly Arg Arg Ala Cys

1 5 10 15

Arg Gly Ser Leu Gly Leu Ala Arg Ala Gln Gly Ala Glu Arg Val

20 25 30

Thr Ser Ser Glu Gln Arg Pro Ala Met Ala Ser Leu Gly Leu Leu

35 40 45

Sequence Listing - P3230R1C1.txt

Leu Leu Leu Leu Leu Thr Ala Leu Pro Pro Leu Trp Ser Ser Ser  
50 55 60

Leu Pro Gly Leu Asp Thr Ala Glu Ser Lys Ala Thr Ile Ala Asp  
65 70 75

Leu Ile Leu Ser Ala Leu Glu Arg Ala Thr Val Phe Leu Glu Gln  
80 85 90

Arg Leu Pro Glu Ile Asn Leu Asp Gly Met Val Gly Val Arg Val  
95 100 105

Leu Glu Glu Gln Leu Lys Ser Val Arg Glu Lys Trp Ala Gln Glu  
110 115 120

Pro Leu Leu Gln Pro Leu Ser Leu Arg Val Gly Met Leu Gly Glu  
125 130 135

Lys Leu Glu Ala Ala Ile Gln Arg Ser Leu His Tyr Leu Lys Leu  
140 145 150

Ser Asp Pro Lys Tyr Leu Arg Glu Phe Gln Leu Thr Leu Gln Pro  
155 160 165

Gly Phe Trp Lys Leu Pro His Ala Trp Ile His Thr Asp Ala Ser  
170 175 180

Leu Val Tyr Pro Thr Phe Gly Pro Gln Asp Ser Phe Ser Glu Glu  
185 190 195

Arg Ser Asp Val Cys Leu Val Gln Leu Leu Gly Thr Gly Thr Asp  
200 205 210

Ser Ser Glu Pro Cys Gly Leu Ser Asp Leu Cys Arg Ser Leu Met  
215 220 225

Thr Lys Pro Gly Cys Ser Gly Tyr Cys Leu Ser His Gln Leu Leu  
230 235 240

Phe Phe Leu Trp Ala Arg Met Arg Gly Cys Thr Gln Gly Pro Leu  
245 250 255

Gln Gln Ser Gln Asp Tyr Ile Asn Leu Phe Cys Ala Asn Met Met  
260 265 270

Asp Leu Asn Arg Arg Ala Glu Ala Ile Gly Tyr Ala Tyr Pro Thr  
275 280 285

Arg Asp Ile Phe Met Glu Asn Ile Met Phe Cys Gly Met Gly Gly  
290 295 300

Phe Ser Asp Phe Tyr Lys Leu Arg Trp Leu Glu Ala Ile Leu Ser  
305 310 315

Trp Gln Lys Gln Gln Glu Gly Cys Phe Gly Glu Pro Asp Ala Glu

Sequence Listing - P3230R1C1.txt

320	325	330
Asp Glu Glu Leu Ser Lys Ala Ile Gln Tyr Gln Gln His Phe Ser		
335	340	345
Arg Arg Val Lys Arg Arg Glu Lys Gln Phe Pro Asp Ser Arg Ser		
350	355	360
Val Ala Gln Ala Gly Val Gln Trp Arg Asn Leu Gly Ser Leu Gln		
365	370	375
Pro Leu Pro Pro Gly Phe Lys Gln Phe Ser Cys Leu Ile Leu Pro		
380	385	390
Ser Ser Trp Asp Tyr Arg Ser Val Pro Pro Tyr Leu Ala Asn Phe		
395	400	405
Tyr Ile Phe Leu Val Glu Thr Gly Phe His His Val Ala His Ala		
410	415	420
Gly Leu Glu Leu Leu Ile Ser Arg Asp Pro Pro Thr Ser Gly Ser		
425	430	435
Gln Ser Val Gly Leu		
440		

<210> 135  
 <211> 884  
 <212> DNA  
 <213> Homo Sapien

<400> 135  
 ggtctgagt cagagctgct gtcattggcgg ccgctctgtg gggcttcttt 50  
 cccgtcctgc tgctgctgct gctatcgggg gatgtccaga gctcggaggt 100  
 gcccggggct gctgctgagg gatcgggagg gagggggggc ggcataggag 150  
 atcgcttcaa gattgagggg cggtgcagttg ttccaggggt gaagcctcag 200  
 gactggatct cggcggcccg agtgcaggta gacggagaag agcacgtcgg 250  
 tttccttaag acagatggga gttttgtggt tcatgatata cttcttgat 300  
 cttatgtagt ggaagttgta tctccagctt acagatttga tcccgttcga 350  
 gtggatatca cttcgaaagg aaaaatgaga gcaagatatg tgaattacat 400  
 caaaacatca gaggttgta gactgcccta tcctctcaa atgaaatctt 450  
 caggccacc ttctacttt attaaaaggg aatcgtgggg ctggacagac 500  
 tttctaata acccaatggt tatgatgatg gttcttctt tattgatatt 550  
 tggcttctg cctaaagtgg tcaacacaag tgatcctgac atgagacggg 600



Sequence Listing - P3230R1C1.txt

aatggagca gtcaatgaat atgctgaatt ccaaccatga gttgcctgat 650  
 gtttctgagt tcatgacaag actcttctct tcaaatcat ctggcaaadc 700  
 tagcagcggc agcagtaaaa caggcaaaag tggggctggc aaaaggaggt 750  
 agtcaggccg tccagagctg gcatttgcac aaacacggca aactgggtg 800  
 gcatccaagt cttggaaaac cgtgtgaagc aactactata aacttgagtc 850  
 atcccgacgt tgatctctta caactgtgta tggt 884

<210> 136

<211> 242

<212> PRT

<213> Homo Sapien

<400> 136

Met Ala Ala Ala Leu Trp Gly Phe Phe Pro Val Leu Leu Leu Leu  
 1 5 10 15

Leu Leu Ser Gly Asp Val Gln Ser Ser Glu Val Pro Gly Ala Ala  
 20 25 30

Ala Glu Gly Ser Gly Gly Ser Gly Val Gly Ile Gly Asp Arg Phe  
 35 40 45

Lys Ile Glu Gly Arg Ala Val Val Pro Gly Val Lys Pro Gln Asp  
 50 55 60

Trp Ile Ser Ala Ala Arg Val Leu Val Asp Gly Glu Glu His Val  
 65 70 75

Gly Phe Leu Lys Thr Asp Gly Ser Phe Val Val His Asp Ile Pro  
 80 85 90

Ser Gly Ser Tyr Val Val Glu Val Val Ser Pro Ala Tyr Arg Phe  
 95 100 105

Asp Pro Val Arg Val Asp Ile Thr Ser Lys Gly Lys Met Arg Ala  
 110 115 120

Arg Tyr Val Asn Tyr Ile Lys Thr Ser Glu Val Val Arg Leu Pro  
 125 130 135

Tyr Pro Leu Gln Met Lys Ser Ser Gly Pro Pro Ser Tyr Phe Ile  
 140 145 150

Lys Arg Glu Ser Trp Gly Trp Thr Asp Phe Leu Met Asn Pro Met  
 155 160 165

Val Met Met Met Val Leu Pro Leu Leu Ile Phe Val Leu Leu Pro  
 170 175 180

Lys Val Val Asn Thr Ser Asp Pro Asp Met Arg Arg Glu Met Glu

Sequence Listing - P3230R1C1.txt

185	190	195
Gln Ser Met Asn Met Leu Asn Ser Asn His Glu Leu Pro Asp Val		
200	205	210
Ser Glu Phe Met Thr Arg Leu Phe Ser Ser Lys Ser Ser Gly Lys		
215	220	225
Ser Ser Ser Gly Ser Ser Lys Thr Gly Lys Ser Gly Ala Gly Lys		
230	235	240

Arg Arg

<210> 137  
 <211> 1571  
 <212> DNA  
 <213> Homo Sapien

<400> 137  
 gatggcgcag ccacagcttc tgtgagattc gatttctccc cagttcccct 50  
 gtgggtctga ggggaccaga agggtgagct acgttggtt tctggaagg 100  
 gaggctatat gcgtcaattc cccaaaacaa gttttgacat ttcccctgaa 150  
 atgtcattct ctatctattc actgcaagtg cctgctgttc caggccttac 200  
 ctgctgggca ctaacggcgg agccaggatg gggacagaat aaaggagcca 250  
 cgacctgtgc caccaactcg cactcagact ctgaactcag acctgaaatc 300  
 ttctcttcac gggaggcttg gcagtttttc ttactcctgt ggtctccaga 350  
 tttcaggcct aagatgaaag cctctagtct tgccttcagc cttctctctg 400  
 ctgcgtttta tctcctatgg actccttcca ctggactgaa gacactcaat 450  
 ttgggaagct gtgtgatcgc cacaacctt caggaaatac gaaatggatt 500  
 ttctgagata cggggcagtg tgcaagccaa agatggaaac attgacatca 550  
 gaatcttaag gaggactgag tctttgcaag acacaaagcc tgcgaatcga 600  
 tgctgcctcc tgcgccatth gctaagactc tatctggaca gggatattaa 650  
 aaactaccag acccctgacc attatactct ccggaagatc agcagcctcg 700  
 ccaattcctt tcttaccatc aagaaggacc tccggctctc tcatgcccac 750  
 atgacatgcc attgtgggga ggaagcaatg aagaaataca gccagattct 800  
 gagtcacttt gaaaagctgg aacctcaggc agcagttgtg aaggctttgg 850  
 gggaactaga cattcttctg caatggatgg aggagacaga ataggaggaa 900

Sequence Listing - P3230R1C1.txt

agtgatgctg ctgctaagaa tattcgaggt caagagctcc agtcttcaat 950

acctgcagag gaggcacgac cccaaccac catctcttta ctgtactagt 1000

cttggtctgg tcacagtgtg tcttatttat gcattacttg cttccttgca 1050

tgattgtctt tatgcatccc caatcttaat tgagaccata ctgtataag 1100

atctttgtaa tatctttctg ctattggata tatttattag ttaatatatt 1150

tatttatttt ttgctattta atgtatttat tttttactt ggacatgaaa 1200

ctttaaaaaa attcacagat tatatttata acctgactag agcaggtgat 1250

gtatttttat acagtaaaaa aaaaaaacct tgtaaattct agaagagtgg 1300

ctaggggggt tattcatttg tattcaacta aggacatatt tactcatgct 1350

gatgctctgt gagatatttg aaattgaacc aatgactact taggatgggt 1400

tgtggaataa gttttgatgt ggaattgcac atctaccta caattactga 1450

ccatccccag tagactcccc agtcccataa ttgtgtatct tccagccagg 1500

aatcctacac ggccagcatg tatttctaca aataaagttt tctttgcata 1550

ccaaaaaaaa aaaaaaaaaa a 1571

<210> 138

<211> 261

<212> PRT

<213> Homo Sapien

<400> 138

Met Arg Gln Phe Pro Lys Thr Ser Phe Asp Ile Ser Pro Glu Met  
1 5 10 15

Ser Phe Ser Ile Tyr Ser Leu Gln Val Pro Ala Val Pro Gly Leu  
20 25 30

Thr Cys Trp Ala Leu Thr Ala Glu Pro Gly Trp Gly Gln Asn Lys  
35 40 45

Gly Ala Thr Thr Cys Ala Thr Asn Ser His Ser Asp Ser Glu Leu  
50 55 60

Arg Pro Glu Ile Phe Ser Ser Arg Glu Ala Trp Gln Phe Phe Leu  
65 70 75

Leu Leu Trp Ser Pro Asp Phe Arg Pro Lys Met Lys Ala Ser Ser  
80 85 90

Leu Ala Phe Ser Leu Leu Ser Ala Ala Phe Tyr Leu Leu Trp Thr  
95 100 105

Sequence Listing - P3230R1C1.txt

Pro Ser Thr Gly Leu Lys Thr Leu Asn Leu Gly Ser Cys Val Ile  
 110 115 120

Ala Thr Asn Leu Gln Glu Ile Arg Asn Gly Phe Ser Glu Ile Arg  
 125 130 135

Gly Ser Val Gln Ala Lys Asp Gly Asn Ile Asp Ile Arg Ile Leu  
 140 145 150

Arg Arg Thr Glu Ser Leu Gln Asp Thr Lys Pro Ala Asn Arg Cys  
 155 160 165

Cys Leu Leu Arg His Leu Leu Arg Leu Tyr Leu Asp Arg Val Phe  
 170 175 180

Lys Asn Tyr Gln Thr Pro Asp His Tyr Thr Leu Arg Lys Ile Ser  
 185 190 195

Ser Leu Ala Asn Ser Phe Leu Thr Ile Lys Lys Asp Leu Arg Leu  
 200 205 210

Ser His Ala His Met Thr Cys His Cys Gly Glu Glu Ala Met Lys  
 215 220 225

Lys Tyr Ser Gln Ile Leu Ser His Phe Glu Lys Leu Glu Pro Gln  
 230 235 240

Ala Ala Val Val Lys Ala Leu Gly Glu Leu Asp Ile Leu Leu Gln  
 245 250 255

Trp Met Glu Glu Thr Glu  
 260

<210> 139

<211> 2395

<212> DNA

<213> Homo Sapien

<400> 139

cctggagccg gaagcgcggc tgcagcaggg cgaggctcca ggtgggggtcg 50

gttccgcatc cagcctagcg tgtccacgat gcggctgggc tccgggactt 100

tcgctacctg ttgcgtagcg atcgaggtgc tagggatcgc ggtcttcctt 150

cggggattct tcccggtccc cgttcgttcc tctgccagag cggaacacgg 200

agcggagccc ccagcgcccc aaccctcggc tggagccagt tctaactgga 250

ccacgtgcc accacctctc ttcagtaaag ttgttattgt tctgatagat 300

gccttgagag atgattttgt gtttgggtca aagggtgtga aatttatgcc 350

ctacacaact taccttgtgg aaaaaggagc atctcacagt tttgtggctg 400

Sequence Listing - P3230R1C1.txt

aagcaaagcc acctacagtt actatgcctc gaatcaaggc attgatgacg 450  
gggagccttc ctggctttgt cgacgtcatc aggaacctca attctcctgc 500  
actgctggaa gacagtgtga taagacaagc aaaagcagct ggaaaaagaa 550  
tagtctttta tggagatgaa acctgggtta aattattccc aaagcatttt 600  
gtggaatatg atggaacaac ctcatTTTTc gtgtcagatt acacagaggt 650  
ggataataat gtcacgaggc atttggataa agtattaaaa agaggagatt 700  
gggacatatt aatcctccac tacctggggc tggaccacat tggccacatt 750  
tcaggggcca acagccccct gattgggcag aagctgagcg agatggacag 800  
cgtgctgatg aagatccaca cctcactgca gtcgaaggag agagagacgc 850  
ctttaccaa tttgctggtt ctttgtggtg accatggcat gtctgaaaca 900  
ggaagtcacg gggcctcctc caccgaggag gtgaatacac ctctgatttt 950  
aatcagttct gcgtttgaaa ggaaacccgg tgatatccga catccaaagc 1000  
acgtccaata gacggatgtg gctgcgacac tggcgatagc acttggttta 1050  
ccgattcaa aagacagtgt agggagcctc ctattcccag ttgtggaagg 1100  
aagaccaatg agagagcagt tgagattttt acatttgaat acagtgcagc 1150  
ttagtaaact gttgcaagag aatgtgccgt catatgaaaa agatcctggg 1200  
tttgagcagt ttaaaatgtc agaaagattg catgggaact ggatcagact 1250  
gtacttggag gaaaagcatt cagaagtcct attcaacctg ggctccaagg 1300  
ttctcaggca gtacctggat gctctgaaga cgctgagctt gtcctgagt 1350  
gcacaagtgg ccagttctc acctgctcc tgctcagcgt cccacaggca 1400  
ctgcacagaa aggctgagct ggaagtcca ctgtcatctc ctgggttttc 1450  
tctgctcttt tatttgggtga tctggttct ttcggccgtt cacgtcattg 1500  
tgtgcacctc agctgaaagt tcgtgctact tctgtggcct ctcgtggctg 1550  
gcggcaggct gcctttcgtt taccagactc tgggtgaaca cctggtgtgt 1600  
gccaaagtgt ggcagtgtcc tggacagggg gcctcaggga aggacgtgga 1650  
gcagccttat ccaggcctc tgggtgtccc gacacagggtg ttcacatctg 1700  
tgctgtcagg tcagatgcct cagtcttgg aaagctaggt tctgcgact 1750  
gttaccaagg tgattgtaaa gagctggcgg tcacagagga acaagcccc 1800

Sequence Listing - P3230R1C1.txt

cagctgaggg ggtgtgtgaa tcggacagcc tcccagcaga ggtgtgggag 1850  
ctgcagctga gggaagaaga gacaatcggc ctggacactc aggaggggtca 1900  
aaaggagact tggtcgcacc actcatcctg ccacccccag aatgcatcct 1950  
gcctcatcag gtccagattt cttccaagg cggacgtttt ctgttggaat 2000  
tcttagtctt tggcctcgga caccttcatt cgtagctgg ggagtgggtg 2050  
tgaggcagtg aagaagaggc ggatgggtcac actcagatcc acagagccca 2100  
ggatcaaggg acccactgca gtggcagcag gactgttggg cccccacccc 2150  
aaccctgcac agccctcatc ccctcttggc ttgagccgtc agaggccctg 2200  
tgctgagtgt ctgaccgaga cactcacagc tttgtcatca gggcacaggc 2250  
ttctcggag ccaggatgat ctgtgccacg cttgcacctc gggcccatct 2300  
gggctcatgc tctctctct gctattgaat tagtacctag ctgcacacag 2350  
tatgtagtta caaaagaat aaacggcaat aattgagaaa aaaaa 2395

<210> 140

<211> 310

<212> PRT

<213> Homo Sapien

<400> 140

Met Arg Leu Gly Ser Gly Thr Phe Ala Thr Cys Cys Val Ala Ile  
1 5 10 15

Glu Val Leu Gly Ile Ala Val Phe Leu Arg Gly Phe Phe Pro Ala  
20 25 30

Pro Val Arg Ser Ser Ala Arg Ala Glu His Gly Ala Glu Pro Pro  
35 40 45

Ala Pro Glu Pro Ser Ala Gly Ala Ser Ser Asn Trp Thr Thr Leu  
50 55 60

Pro Pro Pro Leu Phe Ser Lys Val Val Ile Val Leu Ile Asp Ala  
65 70 75

Leu Arg Asp Asp Phe Val Phe Gly Ser Lys Gly Val Lys Phe Met  
80 85 90

Pro Tyr Thr Thr Tyr Leu Val Glu Lys Gly Ala Ser His Ser Phe  
95 100 105

Val Ala Glu Ala Lys Pro Pro Thr Val Thr Met Pro Arg Ile Lys  
110 115 120

Sequence Listing - P3230R1C1.txt

Ala Leu Met Thr Gly Ser Leu Pro Gly Phe Val Asp Val Ile Arg  
125 130 135

Asn Leu Asn Ser Pro Ala Leu Leu Glu Asp Ser Val Ile Arg Gln  
140 145 150

Ala Lys Ala Ala Gly Lys Arg Ile Val Phe Tyr Gly Asp Glu Thr  
155 160 165

Trp Val Lys Leu Phe Pro Lys His Phe Val Glu Tyr Asp Gly Thr  
170 175 180

Thr Ser Phe Phe Val Ser Asp Tyr Thr Glu Val Asp Asn Asn Val  
185 190 195

Thr Arg His Leu Asp Lys Val Leu Lys Arg Gly Asp Trp Asp Ile  
200 205 210

Leu Ile Leu His Tyr Leu Gly Leu Asp His Ile Gly His Ile Ser  
215 220 225

Gly Pro Asn Ser Pro Leu Ile Gly Gln Lys Leu Ser Glu Met Asp  
230 235 240

Ser Val Leu Met Lys Ile His Thr Ser Leu Gln Ser Lys Glu Arg  
245 250 255

Glu Thr Pro Leu Pro Asn Leu Leu Val Leu Cys Gly Asp His Gly  
260 265 270

Met Ser Glu Thr Gly Ser His Gly Ala Ser Ser Thr Glu Glu Val  
275 280 285

Asn Thr Pro Leu Ile Leu Ile Ser Ser Ala Phe Glu Arg Lys Pro  
290 295 300

Gly Asp Ile Arg His Pro Lys His Val Gln  
305 310

<210> 141

<211> 754

<212> DNA

<213> Homo Sapien

<400> 141

ggcagcaggc aagccttcca gggtatcgtg acgcaccttg aaagtctgag 50

agctactgcc ctacagaaag ttactagtgc cctaaagctg gcgctggcac 100

tgatgttact gctgctgttg gagtacaact tccctataga aaacaactgc 150

cagcacctta agaccactca caccttcaga gtgaagaact taaacccgaa 200

gaaattcagc attcatgacc aggatcacia agtactggctc ctggactctg 250

Sequence Listing - P3230R1C1.txt

ggaatctcat agcagttcca gataaaaact acatacgccc agagatcttc 300  
 ttgcattag cctcatcctt gagctcagcc tctgcggaga aaggaagtcc 350  
 gattctctg ggggtctcta aaggggagtt ttgtctctac tgtgacaagg 400  
 ataaaggaca aagtcattcca tcccttcagc tgaagaagga gaaactgatg 450  
 aagctggctg cccaaaagga atcagcacgc cggcccttca tcttttatag 500  
 ggctcaggtg ggctcctgga acatgctgga gtcggcggct caccccggat 550  
 ggttcatctg cacctcctgc aattgtaatg agcctgttgg ggtgacagat 600  
 aaatttgaga acaggaaaca cattgaattt tcatttcaac cagtttgcaa 650  
 agctgaaatg agccccagtg aggtcagcga ttaggaaact gccccattga 700  
 acgccttctt cgctaatttg aactaattgt ataaaaacac caaacctgct 750

cact 754

<210> 142

<211> 193

<212> PRT

<213> Homo Sapien

<400> 142

Met Leu Leu Leu Leu Leu Glu Tyr Asn Phe Pro Ile Glu Asn Asn  
 1 5 10 15

Cys Gln His Leu Lys Thr Thr His Thr Phe Arg Val Lys Asn Leu  
 20 25 30

Asn Pro Lys Lys Phe Ser Ile His Asp Gln Asp His Lys Val Leu  
 35 40 45

Val Leu Asp Ser Gly Asn Leu Ile Ala Val Pro Asp Lys Asn Tyr  
 50 55 60

Ile Arg Pro Glu Ile Phe Phe Ala Leu Ala Ser Ser Leu Ser Ser  
 65 70 75

Ala Ser Ala Glu Lys Gly Ser Pro Ile Leu Leu Gly Val Ser Lys  
 80 85 90

Gly Glu Phe Cys Leu Tyr Cys Asp Lys Asp Lys Gly Gln Ser His  
 95 100 105

Pro Ser Leu Gln Leu Lys Lys Glu Lys Leu Met Lys Leu Ala Ala  
 110 115 120

Gln Lys Glu Ser Ala Arg Arg Pro Phe Ile Phe Tyr Arg Ala Gln  
 125 130 135

Val Gly Ser Trp Asn Met Leu Glu Ser Ala Ala His Pro Gly Trp



Sequence Listing - P3230R1C1.txt

140	145	150
Phe Ile Cys Thr Ser Cys Asn Cys Asn Glu Pro Val Gly Val Thr		
155	160	165
Asp Lys Phe Glu Asn Arg Lys His Ile Glu Phe Ser Phe Gln Pro		
170	175	180
Val Cys Lys Ala Glu Met Ser Pro Ser Glu Val Ser Asp		
185	190	

<210> 143

<211> 961

<212> DNA

<213> Homo Sapien

<400> 143

ctagagagta tagggcagaa ggatggcaga tgagtgactc cacatccaga 50

gctgcctccc ttaatccag gatcctgtcc ttctgtcct gtaggagtgc 100

ctgttgccag tgtgggggtga gacaagttg tcccacaggg ctgtctgagc 150

agataagatt aagggctggg tctgtgtca attaactcct gtgggcacgg 200

gggctgggaa gagcaaagtc agcgggtgcct acagtcagca ccatgctggg 250

cctgccgtgg aagggaggtc tgtcctgggc gctgctgctg cttctcttag 300

gctcccagat cctgctgac tatgcctggc atttcacga gcaaaggac 350

tgtgatgaac acaatgtcat ggctcggtac ctccctgcc cagtggagtt 400

tgctgtccac acattcaacc aacagagcaa ggactactat gcctacagac 450

tggggcacat cttgaattcc tggaaggagc aggtggagtc caagactgta 500

tttcaatgg agctactgct ggggagaact aggtgtggga aatttgaaga 550

cgacattgac aactgccatt tccaagaaag cacagagctg aacaatactt 600

tcacctgctt cttaccatc agcaccaggc cctggatgac tcagttcagc 650

ctctgaaca agacctgctt ggagggattc cactgagtga aaccactca 700

caggcttgtc catgtgctgc tcccacattc cgtggacatc agcactactc 750

tctgaggac tcttcagtgg ctgagcagct ttggacttgt ttgttatcct 800

atattgcatg tgtttgagat ctcatgacag tgttttagaa aatccacaca 850

tcttgagcct aatcatgtag ttagatcat taaacatcag cattttaaga 900

aaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 950

aaaaaaaaa a 961

# Sequence Listing - P3230R1C1.txt

<210> 144

<211> 147

<212> PRT

<213> Homo Sapien

<400> 144

Met Leu Gly Leu Pro Trp Lys Gly Gly Leu Ser Trp Ala Leu Leu  
1 5 10 15

Leu Leu Leu Leu Gly Ser Gln Ile Leu Leu Ile Tyr Ala Trp His  
20 25 30

Phe His Glu Gln Arg Asp Cys Asp Glu His Asn Val Met Ala Arg  
35 40 45

Tyr Leu Pro Ala Thr Val Glu Phe Ala Val His Thr Phe Asn Gln  
50 55 60

Gln Ser Lys Asp Tyr Tyr Ala Tyr Arg Leu Gly His Ile Leu Asn  
65 70 75

Ser Trp Lys Glu Gln Val Glu Ser Lys Thr Val Phe Ser Met Glu  
80 85 90

Leu Leu Leu Gly Arg Thr Arg Cys Gly Lys Phe Glu Asp Asp Ile  
95 100 105

Asp Asn Cys His Phe Gln Glu Ser Thr Glu Leu Asn Asn Thr Phe  
110 115 120

Thr Cys Phe Phe Thr Ile Ser Thr Arg Pro Trp Met Thr Gln Phe  
125 130 135

Ser Leu Leu Asn Lys Thr Cys Leu Glu Gly Phe His  
140 145

<210> 145

<211> 1157

<212> DNA

<213> Homo Sapien

<400> 145

ctgtgcagct cgaggctcca gaggcacact ccagagagag ccaaggttct 50

gacgcgatga ggaagcacct gagctggtgg tggctggcca ctgtctgcat 100

gctgctcttc agccacctct ctgcggtcca gacgaggggc atcaagcaca 150

gaatcaagtg gaaccggaag gccctgccca gcactgccca gatcactgag 200

gcccaggtgg ctgagaaccg cccgggagcc ttcataagc aaggccgcaa 250

gctcgacatt gacttcggag ccgagggcaa caggtactac gaggccaaact 300

Sequence Listing - P3230R1C1.txt

actggcagtt ccccgatggc atccactaca acggctgctc tgaggcta 350  
 gtgaccaagg aggcatttgt caccggctgc atcaatgcca cccaggcggc 400  
 gaaccagggg gagttccaga agccagacaa caagctccac cagcaggtgc 450  
 tctggcggct ggtccaggag ctctgctccc tcaagcattg cgagttttgg 500  
 ttggagaggg gcgcaggact tcgggtcacc atgcaccagc cagtgtctct 550  
 ctgccttctg gctttgatct ggctcatggt gaaataagct tgccaggagg 600  
 ctggcagtac agagcgcagc agcgagcaaa tcctggcaag tgaccagct 650  
 cttctcccc aaaccacgc gtgttctgaa ggtgcccagg agcggcgatg 700  
 cactgcact gcaaatgccg ctcccagta tgcgccctgg tatgtgcctg 750  
 cgttctgata gatgggggac tgtggcttct ccgtcactcc attctcagcc 800  
 cctagcagag cgtctggcac actagattag tagtaaagtc ttgatgagaa 850  
 gaacacatca ggcactgcgc cacctgcttc acagtacttc ccaacaactc 900  
 ttagaggtag gtgtattccc gttttacaga taaggaaact gaggcccaga 950  
 gagctgaagt actgcacca gcataccag ctagaaagtg gcagagccag 1000  
 gattcaacc tggttgtct aaccaggt tttctgtct gtccaattcc 1050  
 agagctgtct ggtgatcact ttatgtctca cagggacca catccaaca 1100  
 tgtatctcta atgaaattgt gaaagctcca tgtttagaaa taaatgaaa 1150  
 cacctga 1157

<210> 146

<211> 176

<212> PRT

<213> Homo Sapien

<400> 146

Met Arg Lys His Leu Ser Trp Trp Trp Leu Ala Thr Val Cys Met  
 1 5 10 15

Leu Leu Phe Ser His Leu Ser Ala Val Gln Thr Arg Gly Ile Lys  
 20 25 30

His Arg Ile Lys Trp Asn Arg Lys Ala Leu Pro Ser Thr Ala Gln  
 35 40 45

Ile Thr Glu Ala Gln Val Ala Glu Asn Arg Pro Gly Ala Phe Ile  
 50 55 60

Lys Gln Gly Arg Lys Leu Asp Ile Asp Phe Gly Ala Glu Gly Asn

Sequence Listing - P3230R1C1.txt

65	70	75
Arg Tyr Tyr Glu Ala Asn Tyr Trp Gln Phe Pro Asp Gly Ile His		
80	85	90
Tyr Asn Gly Cys Ser Glu Ala Asn Val Thr Lys Glu Ala Phe Val		
95	100	105
Thr Gly Cys Ile Asn Ala Thr Gln Ala Ala Asn Gln Gly Glu Phe		
110	115	120
Gln Lys Pro Asp Asn Lys Leu His Gln Gln Val Leu Trp Arg Leu		
125	130	135
Val Gln Glu Leu Cys Ser Leu Lys His Cys Glu Phe Trp Leu Glu		
140	145	150
Arg Gly Ala Gly Leu Arg Val Thr Met His Gln Pro Val Leu Leu		
155	160	165
Cys Leu Leu Ala Leu Ile Trp Leu Met Val Lys		
170	175	

<210> 147

<211> 333

<212> DNA

<213> Homo Sapien

<400> 147

gccttggcct cccaaagggc tgggattata ggcgtgacca ccatgtctgg 50

tccagagtct catttcctga tgatttatag actcaaagaa aactcatgtt 100

cagaagctct cttctcttct ggctctctct ctgtcttctt tcctctttc 150

ttcttatttt aattagtagc atctactcag agtcatgcaa gctggaaatc 200

tttcattttg cttgtcagtg gggtaggtca ctgagtctta gtttttattt 250

tttgaaattt caactttcag attcaggggg tacatgtgaa ggtttgtttt 300

atgagtatat tgcatgatgc tgaggtttgg ggt 333

<210> 148

<211> 73

<212> PRT

<213> Homo Sapien

<400> 148

Met Phe Arg Ser Ser Leu Leu Phe Trp Pro Pro Leu Cys Leu Leu
1 5 10 15
Ser Leu Phe Leu Leu Ile Leu Ile Ser Ser Ile Tyr Ser Glu Ser
20 25 30

Sequence Listing - P3230R1C1.txt

Cys Lys Leu Glu Ile Phe His Phe Ala Cys Gln Trp Gly Arg Ser  
35 40 45

Leu Ser Leu Ser Phe Tyr Phe Leu Lys Phe Gln Leu Ser Asp Ser  
50 55 60

Gly Gly Thr Cys Glu Gly Leu Phe Tyr Glu Tyr Ile Ala  
65 70

<210> 149

<211> 1893

<212> DNA

<213> Homo Sapien

<400> 149

gtctccgctg cacaggaact tcagcaccca caggcgccgac agcgctcccc 50  
tctacctgga gacttgactc ccgcgcgccc caaccctgct tatcccttga 100  
ccgtcgagtg tcagagatcc tgcagccgcc cagtcccggc cctctccccg 150  
ccccacccc accctcctgg ctcttctgt ttttactct ccttttcatt 200  
cataacaaaa gctacagctc caggagccca gcgccgggct gtgaccaag 250  
ccgagcgtgg aagaatgggg ttctcggga ccggcacttg gattctggtg 300  
ttagtgtcc cgattcaagc tttcccaaa cctggaggaa gccaagacaa 350  
atctctacat aatagagaat taagtgcaga aagaccttg aatgaacaga 400  
ttgtctgaagc agaagaagac aagattaaaa aaacatatcc tccagaaaac 450  
aagccaggtc agagcaacta ttctttgtt gataactga acctgctaaa 500  
ggcaataaca gaaaaggaaa aaattgagaa agaaagacaa tctataagaa 550  
gctccccact tgataataag ttgaatgtgg aagatgttga ttcaaccaag 600  
aatcgaaaac tgatcgatga ttatgactct actaagagtg gattggatca 650  
taaatttcaa gatgatccag atggtcttca tcaactagac gggactcctt 700  
taaccgctga agacattgtc cataaaatcg ctgccaggat ttatgaagaa 750  
aatgacagag ccgtgtttga caagattgtt tctaaactac ttaatctcgg 800  
ccttatcaca gaaagccaag cacatacact ggaagatgaa gtagcagagg 850  
ttttacaaaa attaatttca aaggaagcca acaattatga ggaggatccc 900  
aataagccca caagctggac tgagaatcag gctggaaaaa taccagagaa 950  
agtgactcca atggcagcaa ttcaagatgg tcttgctaag ggagaaaacg 1000  
atgaaacagt atctaacaca ttaacctga caaatggcctt ggaaaggaga 1050

Sequence Listing - P3230R1C1.txt

actaaaacct acagtgaaga caactttgag gaactccaat atttcccaa 1100  
 tttctatgcg ctactgaaaa gtattgattc agaaaaagaa gcaaaagaga 1150  
 aagaaacact gattactatc atgaaaacac tgattgactt tgtgaagatg 1200  
 atggtgaaat atggaacaat atctccagaa gaaggtgttt cctaccttga 1250  
 aaacttggat gaaatgattg ctcttcagac caaaaacaag ctagaaaaaa 1300  
 atgctactga caatataagc aagcttttcc cagcaccatc agagaagagt 1350  
 catgaagaaa cagacagtac caaggaagaa gcagctaaga tggaaaagga 1400  
 atatggaagc ttgaaggatt ccacaaaaga tgataactcc aaccaggag 1450  
 gaaagacaga tgaacccaaa ggaaaaacag aagcctattt ggaagccatc 1500  
 agaaaaaata ttgaatgggt gaagaaacat gacaaaaagg gaaataaaga 1550  
 agattatgac ctttcaaaga tgagagactt catcaataaa caagctgatg 1600  
 cttatgtgga gaaaggcatc cttgacaagg aagaagccga ggccatcaag 1650  
 cgcatttata gcagcctgta aaaatggcaa aagatccagg agtctttcaa 1700  
 ctgtttcaga aaacataata tagcttaaaa cacttctaatt tctgtgatta 1750  
 aaatTTTTG acccaagggt tattagaaag tgctgaattt acagtagtta 1800  
 accttttaca agtggttaaa acatagcttt cttcccgtaa aaactatctg 1850  
 aaagtaaagt tgtatgtaag ctgaaaaaaaa aaaaaaaaaa aaa 1893

<210> 150

<211> 468

<212> PRT

<213> Homo Sapien

<400> 150

Met Gly Phe Leu Gly Thr Gly Thr Trp Ile Leu Val Leu Val Leu

1 5 10 15

Pro Ile Gln Ala Phe Pro Lys Pro Gly Gly Ser Gln Asp Lys Ser

20 25 30

Leu His Asn Arg Glu Leu Ser Ala Glu Arg Pro Leu Asn Glu Gln

35 40 45

Ile Ala Glu Ala Glu Glu Asp Lys Ile Lys Lys Thr Tyr Pro Pro

50 55 60

Glu Asn Lys Pro Gly Gln Ser Asn Tyr Ser Phe Val Asp Asn Leu

65 70 75

Sequence Listing - P3230R1C1.txt

Asn Leu Leu Lys Ala Ile Thr Glu Lys Glu Lys Ile Glu Lys Glu	80	85	90
Arg Gln Ser Ile Arg Ser Ser Pro Leu Asp Asn Lys Leu Asn Val	95	100	105
Glu Asp Val Asp Ser Thr Lys Asn Arg Lys Leu Ile Asp Asp Tyr	110	115	120
Asp Ser Thr Lys Ser Gly Leu Asp His Lys Phe Gln Asp Asp Pro	125	130	135
Asp Gly Leu His Gln Leu Asp Gly Thr Pro Leu Thr Ala Glu Asp	140	145	150
Ile Val His Lys Ile Ala Ala Arg Ile Tyr Glu Glu Asn Asp Arg	155	160	165
Ala Val Phe Asp Lys Ile Val Ser Lys Leu Leu Asn Leu Gly Leu	170	175	180
Ile Thr Glu Ser Gln Ala His Thr Leu Glu Asp Glu Val Ala Glu	185	190	195
Val Leu Gln Lys Leu Ile Ser Lys Glu Ala Asn Asn Tyr Glu Glu	200	205	210
Asp Pro Asn Lys Pro Thr Ser Trp Thr Glu Asn Gln Ala Gly Lys	215	220	225
Ile Pro Glu Lys Val Thr Pro Met Ala Ala Ile Gln Asp Gly Leu	230	235	240
Ala Lys Gly Glu Asn Asp Glu Thr Val Ser Asn Thr Leu Thr Leu	245	250	255
Thr Asn Gly Leu Glu Arg Arg Thr Lys Thr Tyr Ser Glu Asp Asn	260	265	270
Phe Glu Glu Leu Gln Tyr Phe Pro Asn Phe Tyr Ala Leu Leu Lys	275	280	285
Ser Ile Asp Ser Glu Lys Glu Ala Lys Glu Lys Glu Thr Leu Ile	290	295	300
Thr Ile Met Lys Thr Leu Ile Asp Phe Val Lys Met Met Val Lys	305	310	315
Tyr Gly Thr Ile Ser Pro Glu Glu Gly Val Ser Tyr Leu Glu Asn	320	325	330
Leu Asp Glu Met Ile Ala Leu Gln Thr Lys Asn Lys Leu Glu Lys	335	340	345

Sequence Listing - P3230R1C1.txt

Asn Ala Thr Asp Asn Ile Ser Lys Leu Phe Pro Ala Pro Ser Glu  
350 355 360

Lys Ser His Glu Glu Thr Asp Ser Thr Lys Glu Glu Ala Ala Lys  
365 370 375

Met Glu Lys Glu Tyr Gly Ser Leu Lys Asp Ser Thr Lys Asp Asp  
380 385 390

Asn Ser Asn Pro Gly Gly Lys Thr Asp Glu Pro Lys Gly Lys Thr  
395 400 405

Glu Ala Tyr Leu Glu Ala Ile Arg Lys Asn Ile Glu Trp Leu Lys  
410 415 420

Lys His Asp Lys Lys Gly Asn Lys Glu Asp Tyr Asp Leu Ser Lys  
425 430 435

Met Arg Asp Phe Ile Asn Lys Gln Ala Asp Ala Tyr Val Glu Lys  
440 445 450

Gly Ile Leu Asp Lys Glu Glu Ala Glu Ala Ile Lys Arg Ile Tyr  
455 460 465

Ser Ser Leu

<210> 151

<211> 2598

<212> DNA

<213> Homo Sapien

<400> 151

cggctcgagg ctcccgccag gagaaaggaa cattctgagg ggagtctaca 50

ccctgtggag ctcaagatgg tcctgagtg ggcgctgtgc ttccgaatga 100

aggactcggc attgaagggtg ctttatctgc ataataacca gcttctagct 150

ggagggctgc atgcagggaa ggtcattaaa ggtgaagaga tcagcgtggt 200

ccccaatcgg tggctggatg ccagcctgtc ccccgctatc ctgggtgtcc 250

agggtggaag ccagtgcctg tcattgtggg tggggcagga gccgactcta 300

acactagagc cagtgaacat catggagctc tatcttggtg ccaaggaatc 350

caagagcttc accttctacc ggcgggacat ggggctcacc tccagcttcg 400

agtcggctgc ctaccgggc tggttcctgt gcacggtgcc tgaagccgat 450

cagcctgtca gactaccca gttcccgag aatggtggct ggaatgcccc 500

catcacagac ttctacttcc agcagtgtga ctagggaac gtgccccca 550



Sequence Listing - P3230R1C1.txt

gaactccctg ggcagagcca gctcgggtga ggggtgagtg gaggagacc 600  
atggcggaca atcactctct ctgctctcag gacccccacg tctgacttag 650  
tgggcacctg accactttgt cttctggttc ccagtttga taaattctga 700  
gatttgagc tcagtccacg gtctccccc actggatggt gctactgctg 750  
tggaaccttg taaaaacat gtggggtaaa ctgggaataa catgaaaaga 800  
tttctgtggg ggtgggggtg gggagtggg ggaatcattc ctgcttaatg 850  
gtaactgaca agtgttacc tgagccccgc aggccaacc atccccagt 900  
gagccttata gggtcagtag ctctccacat gaagtctgt cactcaccac 950  
tgtgcaggag agggagggtg tcatagagtc agggatctat ggccttggc 1000  
ccagccccac ccccttcct ttaatctgc cactgtcata tgctacctt 1050  
cctatctctt cctcatcat cttgttggtg gcatgaggag gtggtgatgt 1100  
cagaagaaat ggctcgagct cagaagataa aagataagta gggatgctg 1150  
atcctctttt aaaaaccaa gatacaatca aaatcccaga tgctggtctc 1200  
tattcccatg aaaaagtgt catgacatat tgagaagacc tacttacaaa 1250  
gtggcatata ttgcaattta ttttaattaa aagataccta tttatatatt 1300  
tctttataga aaaaagtctg gaagagtta cttcaattgt agcaatgtca 1350  
gggtggtggc agtatagggt attttcttt taattctgtt aatttatctg 1400  
tatttcctaa ttttctaca atgaagatga attccttgta taaaataag 1450  
aaaagaaatt aatcttgagg taagcagagc agacatcatc tctgattgtc 1500  
ctcagcctcc acttcccag agtaaattca aattgaatcg agctctgctg 1550  
ctctggttgg ttgtagtagt gatcaggaaa cagatctcag caaagccact 1600  
gaggaggagg ctgtgctgag tttgtgtggc tggaatctct gggtaaggaa 1650  
cttaaagaac aaaaatcatc tggttaattct ttctagaag gatcacagcc 1700  
cctgggattc caaggcattg gatccagtct ctaagaaggc tgctgtactg 1750  
gttgaattgt gtccccctca aattcacatc cttcttgga tctcagtctg 1800  
tgagtttatt tggagataag gtctctgcag atgtagttag ttaagacaag 1850  
gtcatgctgg atgaaggtag acctaaattc aatatgactg gtttccttgt 1900  
atgaaaagga gaggacacag agacagagga gacgcgggga agactatgta 1950

Sequence Listing - P3230R1C1.txt

aagatgaagg cagagatcgg agttttgcag ccacaagcta agaaacacca 2000  
aggattgtgg caaccatcag aagcttggaa gaggcaaaga agaattcttc 2050  
cctagaggct ttagagggat aacggctctg ctgaaacctt aatctcagac 2100  
ttccagcctc ctgaacgaag aaagaataaa ttctggctgt ttaagccac 2150  
caaggataat tggttacagc agctctagga aactaatata gctgctaaaa 2200  
tgatccctgt ctctctgtgt ttacattctg tgtgtgtccc ctcccacaat 2250  
gtaccaaagt tgtctttgtg accaatagaa tatggcagaa gtgatggcat 2300  
gccatttcca agattagggt ataaaagaca ctgcagcttc tacttgagcc 2350  
ctctctctct gccaccacc gcccacaatc tatcttggt cactcgctct 2400  
gggggaagct agctgccatg ctatgagcag gcctataaag agacttacgt 2450  
ggtaaaaaat gaagtctct gccacagcc acattagtga acctagaagc 2500  
agagactctg tgagataatc gatgtttgtt gttttaagtt gctcagtttt 2550  
ggtctaactt gttatgcagc aatagataaa taatatgcag agaaagag 2598

<210> 152

<211> 155

<212> PRT

<213> Homo Sapien

<400> 152

Met Val Leu Ser Gly Ala Leu Cys Phe Arg Met Lys Asp Ser Ala
1 5 10 15
Leu Lys Val Leu Tyr Leu His Asn Asn Gln Leu Leu Ala Gly Gly
20 25 30
Leu His Ala Gly Lys Val Ile Lys Gly Glu Glu Ile Ser Val Val
35 40 45
Pro Asn Arg Trp Leu Asp Ala Ser Leu Ser Pro Val Ile Leu Gly
50 55 60
Val Gln Gly Gly Ser Gln Cys Leu Ser Cys Gly Val Gly Gln Glu
65 70 75
Pro Thr Leu Thr Leu Glu Pro Val Asn Ile Met Glu Leu Tyr Leu
80 85 90
Gly Ala Lys Glu Ser Lys Ser Phe Thr Phe Tyr Arg Arg Asp Met
95 100 105
Gly Leu Thr Ser Ser Phe Glu Ser Ala Ala Tyr Pro Gly Trp Phe

Sequence Listing - P3230R1C1.txt

110 115 120

Leu Cys Thr Val Pro Glu Ala Asp Gln Pro Val Arg Leu Thr Gln  
125 130 135

Leu Pro Glu Asn Gly Gly Trp Asn Ala Pro Ile Thr Asp Phe Tyr  
140 145 150

Phe Gln Gln Cys Asp  
155

<210> 153

<211> 1152

<212> DNA

<213> Homo Sapien

<400> 153

cttcagaaca ggttctcctt ccccagtcac cagttgctcg agttagaatt 50  
gtctgcaatg gccgccctgc agaaatctgt gagctctttc cttatgggga 100  
ccctggccac cagctgcctc cttctcttgg ccctcttggt acagggagga 150  
gcagctgctc ccatcagctc cactgcagg cttgacaagt ccaactcca 200  
gcagccctat atcaccaacc gcaccttcac gctggctaag gaggctagct 250  
tggctgataa caacacagac gttcgtctca ttggggagaa actgttcac 300  
ggagtcagta tgagtgcgcg ctgctatctg atgaagcagg tgctgaactt 350  
caccttgaa gaagtgcgtg tcctcaatc tgatagggtc cagcctata 400  
tgcaggaggt ggtgcccttc ctggccaggc tcagcaacag gctaagcaca 450  
tgtcatattg aaggtgatga cctgcatatc cagaggaatg tgcaaaagct 500  
gaaggacaca gtgaaaaagc ttggagagag tggagagatc aaagcaattg 550  
gagaactgga tttgtgttt atgtctctga gaaatgcctg catttgacca 600  
gagcaaagct gaaaaatgaa taactaacc ctttcctg ctagaataa 650  
caattagatg cccaaagcg attttttta accaaaagga agatgggaag 700  
ccaaactcca tcatgatggg tggattcaa atgaaccct gcgtagtta 750  
caaaggaaac caatgccact ttgtttata agaccagaag gtagactttc 800  
taagcataga tatttattga taacattca ttgtaactgg tgtctatac 850  
acagaaaaca atttatttt taaataattg tcttttcca taaaaagat 900  
tactttccat tccttaggg gaaaaaacc ctaaatagct tcattgttcc 950  
ataatcagta ctttatatt ataatgtat ttattattat tataagactg 1000

Sequence Listing - P3230R1C1.txt

cattttattt atatcatttt attaatatgg atttatttat agaaacatca 1050

ttcgatattg ctacttgagt gtaaggctaa tattgatatt tatgacaata 1100

attatagagc tataacatgt ttatttgacc tcaataaaca cttggatatc 1150

cc 1152

<210> 154

<211> 179

<212> PRT

<213> Homo Sapien

<400> 154

Met Ala Ala Leu Gln Lys Ser Val Ser Ser Phe Leu Met Gly Thr  
1 5 10 15

Leu Ala Thr Ser Cys Leu Leu Leu Leu Ala Leu Leu Val Gln Gly  
20 25 30

Gly Ala Ala Ala Pro Ile Ser Ser His Cys Arg Leu Asp Lys Ser  
35 40 45

Asn Phe Gln Gln Pro Tyr Ile Thr Asn Arg Thr Phe Met Leu Ala  
50 55 60

Lys Glu Ala Ser Leu Ala Asp Asn Asn Thr Asp Val Arg Leu Ile  
65 70 75

Gly Glu Lys Leu Phe His Gly Val Ser Met Ser Glu Arg Cys Tyr  
80 85 90

Leu Met Lys Gln Val Leu Asn Phe Thr Leu Glu Glu Val Leu Phe  
95 100 105

Pro Gln Ser Asp Arg Phe Gln Pro Tyr Met Gln Glu Val Val Pro  
110 115 120

Phe Leu Ala Arg Leu Ser Asn Arg Leu Ser Thr Cys His Ile Glu  
125 130 135

Gly Asp Asp Leu His Ile Gln Arg Asn Val Gln Lys Leu Lys Asp  
140 145 150

Thr Val Lys Lys Leu Gly Glu Ser Gly Glu Ile Lys Ala Ile Gly  
155 160 165

Glu Leu Asp Leu Leu Phe Met Ser Leu Arg Asn Ala Cys Ile  
170 175

<210> 155

<211> 1320

<212> DNA

<213> Homo Sapien

Sequence Listing - P3230R1C1.txt

<400> 155

ggcttgctga aaataaatc aggactccta acctgctcca gtcagcctgc 50  
ttccacgagg cctgtcagtc agtgcccgcac ttgtgactga gtgtgcagtg 100  
cccagcatgt accaggctcag tgcagagggc tgcctgaggg ctgtgctgag 150  
agggagagga gcagagatgc tgctgagggg ggagggaggg caagctgcca 200  
ggtttggggc tggggggccaa gtggagttag aaactgggat cccaggggga 250  
gggtgcagat gagggagcga cccagattag gtgaggacag ttcttcatt 300  
agccttttc tacagggtgg tgcattcttg gcaatggtca tgggaacca 350  
cacctacagc cactggccca gctgctgccc cagcaaaggg caggacacct 400  
ctgaggagct gctgaggtgg agcactgtgc ctgtgcctcc ctagagcct 450  
gctaggccca accgccccc agagtctgt agggccagtg aagatggacc 500  
cctcaacagc agggccatct cccctggag atatgagttg gacagagact 550  
tgaaccggct ccccaggac ctgtaccacg cccgttgct gtgcccgcac 600  
tgcgtcagcc tacagacagg ctcccatg gacccccggg gcaactcgga 650  
gctgctctac cacaaccaga ctgtcttcta caggcggcca tgccatggcg 700  
agaagggcac ccacaagggc tactgcctgg agcgaggct gtaccgtgtt 750  
tccttagctt gtgtgtgtgt gcggccccgt gtgatgggct agccggacct 800  
gctggaggct ggtcccttt tgggaaacct ggagccagg gtacaaccac 850  
ttgcatgaa gggccaggat gccagatgc ttggcccctg tgaagtgctg 900  
tctggagcag caggatccc ggacaggatg gggggctttg gggaaaacct 950  
gcactctgc acatttgaa aagagcagct gctgcttagg gccgccgga 1000  
gctggtgtcc tgcattttc tctcaggaaa ggttttcaa gttctgcca 1050  
tttctggagg ccaccactcc tgtctcttc tcttttcca tcccctgcta 1100  
ccctggccca gcacaggcac ttctagata tttcccctt gctggagaag 1150  
aaagagcccc tggttttatt tgtttgtta ctcactc agtgagcatc 1200  
tactttgggt gcattctagt gtagttacta gtctttgac atggatgatt 1250  
ctgaggagga agctgttatt gaatgtatag agatttatcc aaataaatat 1300  
ctttatttaa aaatgaaaa 1320

Sequence Listing - P3230R1C1.txt

<210> 156  
 <211> 177  
 <212> PRT  
 <213> Homo Sapien

<400> 156  
 Met Arg Glu Arg Pro Arg Leu Gly Glu Asp Ser Ser Leu Ile Ser  
 1 5 10 15  
 Leu Phe Leu Gln Val Val Ala Phe Leu Ala Met Val Met Gly Thr  
 20 25 30  
 His Thr Tyr Ser His Trp Pro Ser Cys Cys Pro Ser Lys Gly Gln  
 35 40 45  
 Asp Thr Ser Glu Glu Leu Leu Arg Trp Ser Thr Val Pro Val Pro  
 50 55 60  
 Pro Leu Glu Pro Ala Arg Pro Asn Arg His Pro Glu Ser Cys Arg  
 65 70 75  
 Ala Ser Glu Asp Gly Pro Leu Asn Ser Arg Ala Ile Ser Pro Trp  
 80 85 90  
 Arg Tyr Glu Leu Asp Arg Asp Leu Asn Arg Leu Pro Gln Asp Leu  
 95 100 105  
 Tyr His Ala Arg Cys Leu Cys Pro His Cys Val Ser Leu Gln Thr  
 110 115 120  
 Gly Ser His Met Asp Pro Arg Gly Asn Ser Glu Leu Leu Tyr His  
 125 130 135  
 Asn Gln Thr Val Phe Tyr Arg Arg Pro Cys His Gly Glu Lys Gly  
 140 145 150  
 Thr His Lys Gly Tyr Cys Leu Glu Arg Arg Leu Tyr Arg Val Ser  
 155 160 165  
 Leu Ala Cys Val Cys Val Arg Pro Arg Val Met Gly  
 170 175

<210> 157  
 <211> 1515  
 <212> DNA  
 <213> Homo Sapien

<400> 157  
 ccggcgatgt cgctcgtgct gctaagcctg gccgcgctgt gcaggagcgc 50  
 cgtaccccca gagccgaccg ttcaatgtgg ctctgaaact gggccatctc 100  
 cagagtggat gctacaacat gatctaattcc ccggagactt gagggacctc 150

Sequence Listing - P3230R1C1.txt

cgagtagaac ctgttacaac tagtgttgca acaggggact attcaatttt 200  
gatgaatgta agctgggtac tccgggcaga tgccagcatc cgcttggtga 250  
agggcaccac gatttgtgtg acgggcaaaa gcaactcca gtcctacagc 300  
tgtgtgaggt gcaattacac agaggccttc cagactcaga ccagaccctc 350  
tggtggtaaa tggacatttt cctacatcgg ctccctgta gagctgaaca 400  
cagtctattt cattggggcc cataatattc ctaatgcaaa tatgaatgaa 450  
gatggccctt ccatgtctgt gaatttcacc tcaccaggct gcctagacca 500  
cataatgaaa tataaaaaaa agtgtgtcaa ggccggaagc ctgtgggatc 550  
cgaacatcac tgcttgtaag aagaatgagg agacagtaga agtgaacttc 600  
acaaccactc ccctgggaaa cagatacatg gctcttatcc aacacagcac 650  
tatcatcggg tttctcagg tgtttgagcc acaccagaag aaacaaacgc 700  
gagcttcagt ggtgattcca gtgactgggg atagtgaagg tgctacggtg 750  
cagctgactc catattttcc tacttgtggc agcgactgca tccgacataa 800  
aggaacagtt gtgctctgcc cacaaacagg cgtcccttc cctctggata 850  
acaacaaaag caagccggga ggctggctgc ctctctcct gctgtctctg 900  
ctggtggcca catgggtgct ggtggcaggg atctatctaa tgtggaggca 950  
cgaaaggatc aagaagactt cttttctac caccacacta ctgccccca 1000  
ttaaggttct tgtggtttac ccatctgaaa tatgtttcca tcacacaatt 1050  
tgttacttca ctgaatttct tcaaaacat tgcagaagtg aggtcatcct 1100  
tgaaaagtgg cagaaaaaga aaatagcaga gatgggtcca gtgcagtggc 1150  
ttgccactca aaagaaggca gcagacaaag tcgtcttct tctttccaat 1200  
gacgtcaaca gtgtgtgcga tggtagctgt ggcaagagcg agggcagtcc 1250  
cagtgagaac tctcaagacc tctccccct tgcctttaac cttttctgca 1300  
gtgatctaag aagccagatt catctgcaca aatactggt ggtctacttt 1350  
agagagattg atacaaaaga cgattacaat gctctcagt tctgccccaa 1400  
gtaccacctc atgaaggatg ccactgcttt ctgtgcagaa cttctcatg 1450  
tcaagcagca ggtgtcagca ggaaaaagat cacaagcctg ccacgatggc 1500  
tgctgctcct tgtag 1515

Sequence Listing - P3230R1C1.txt

<210> 158

<211> 502

<212> PRT

<213> Homo Sapien

<400> 158

Met Ser Leu Val Leu Leu Ser Leu Ala Ala Leu Cys Arg Ser Ala  
1 5 10 15

Val Pro Arg Glu Pro Thr Val Gln Cys Gly Ser Glu Thr Gly Pro  
20 25 30

Ser Pro Glu Trp Met Leu Gln His Asp Leu Ile Pro Gly Asp Leu  
35 40 45

Arg Asp Leu Arg Val Glu Pro Val Thr Thr Ser Val Ala Thr Gly  
50 55 60

Asp Tyr Ser Ile Leu Met Asn Val Ser Trp Val Leu Arg Ala Asp  
65 70 75

Ala Ser Ile Arg Leu Leu Lys Ala Thr Lys Ile Cys Val Thr Gly  
80 85 90

Lys Ser Asn Phe Gln Ser Tyr Ser Cys Val Arg Cys Asn Tyr Thr  
95 100 105

Glu Ala Phe Gln Thr Gln Thr Arg Pro Ser Gly Gly Lys Trp Thr  
110 115 120

Phe Ser Tyr Ile Gly Phe Pro Val Glu Leu Asn Thr Val Tyr Phe  
125 130 135

Ile Gly Ala His Asn Ile Pro Asn Ala Asn Met Asn Glu Asp Gly  
140 145 150

Pro Ser Met Ser Val Asn Phe Thr Ser Pro Gly Cys Leu Asp His  
155 160 165

Ile Met Lys Tyr Lys Lys Lys Cys Val Lys Ala Gly Ser Leu Trp  
170 175 180

Asp Pro Asn Ile Thr Ala Cys Lys Lys Asn Glu Glu Thr Val Glu  
185 190 195

Val Asn Phe Thr Thr Thr Pro Leu Gly Asn Arg Tyr Met Ala Leu  
200 205 210

Ile Gln His Ser Thr Ile Ile Gly Phe Ser Gln Val Phe Glu Pro  
215 220 225

His Gln Lys Lys Gln Thr Arg Ala Ser Val Val Ile Pro Val Thr  
230 235 240



Sequence Listing - P3230R1C1.txt

Gly Asp Ser Glu Gly Ala Thr Val Gln Leu Thr Pro Tyr Phe Pro  
245 250 255

Thr Cys Gly Ser Asp Cys Ile Arg His Lys Gly Thr Val Val Leu  
260 265 270

Cys Pro Gln Thr Gly Val Pro Phe Pro Leu Asp Asn Asn Lys Ser  
275 280 285

Lys Pro Gly Gly Trp Leu Pro Leu Leu Leu Leu Ser Leu Leu Val  
290 295 300

Ala Thr Trp Val Leu Val Ala Gly Ile Tyr Leu Met Trp Arg His  
305 310 315

Glu Arg Ile Lys Lys Thr Ser Phe Ser Thr Thr Thr Leu Leu Pro  
320 325 330

Pro Ile Lys Val Leu Val Val Tyr Pro Ser Glu Ile Cys Phe His  
335 340 345

His Thr Ile Cys Tyr Phe Thr Glu Phe Leu Gln Asn His Cys Arg  
350 355 360

Ser Glu Val Ile Leu Glu Lys Trp Gln Lys Lys Lys Ile Ala Glu  
365 370 375

Met Gly Pro Val Gln Trp Leu Ala Thr Gln Lys Lys Ala Ala Asp  
380 385 390

Lys Val Val Phe Leu Leu Ser Asn Asp Val Asn Ser Val Cys Asp  
395 400 405

Gly Thr Cys Gly Lys Ser Glu Gly Ser Pro Ser Glu Asn Ser Gln  
410 415 420

Asp Leu Phe Pro Leu Ala Phe Asn Leu Phe Cys Ser Asp Leu Arg  
425 430 435

Ser Gln Ile His Leu His Lys Tyr Val Val Val Tyr Phe Arg Glu  
440 445 450

Ile Asp Thr Lys Asp Asp Tyr Asn Ala Leu Ser Val Cys Pro Lys  
455 460 465

Tyr His Leu Met Lys Asp Ala Thr Ala Phe Cys Ala Glu Leu Leu  
470 475 480

His Val Lys Gln Gln Val Ser Ala Gly Lys Arg Ser Gln Ala Cys  
485 490 495

His Asp Gly Cys Cys Ser Leu  
500

<210> 159

Sequence Listing - P3230R1C1.txt

<211> 535

<212> DNA

<213> Homo Sapien

<400> 159

agccaccagc gcaacatgac agtgaagacc ctgcatggcc cagccatggt 50  
caagtacttg ctgctgtcga tattggggct tgcctttctg agtgaggcgg 100  
cagctcggaa aatccccaaa gtaggacata cttttttcca aaagcctgag 150  
agttgcccgc ctgtgccagg aggtagtatg aagcttgaca ttggcatcat 200  
caatgaaaac cagcgcgttt ccatgtcacg taacatcgag agccgctcca 250  
cctccccctg gaattacact gtcacttggg accccaaccg gtaccctctg 300  
gaagttgtac aggcccagtg taggaacttg ggctgcatca atgctcaagg 350  
aaaggaagac atctcatga attccgttcc catccagcaa gagaccctgg 400  
tcgtccggag gaagcaccaa ggctgctctg tttctttcca gttggagaag 450  
gtgctgggtga ctgttggtg cactgcgtc acccctgtca tccaccatgt 500  
gcagtaagag gtgcatatcc actcagctga agaag 535

<210> 160

<211> 163

<212> PRT

<213> Homo Sapien

<400> 160

Met Thr Val Lys Thr Leu His Gly Pro Ala Met Val Lys Tyr Leu  
1 5 10 15  
Leu Leu Ser Ile Leu Gly Leu Ala Phe Leu Ser Glu Ala Ala Ala  
20 25 30  
Arg Lys Ile Pro Lys Val Gly His Thr Phe Phe Gln Lys Pro Glu  
35 40 45  
Ser Cys Pro Pro Val Pro Gly Ser Met Lys Leu Asp Ile Gly  
50 55 60  
Ile Ile Asn Glu Asn Gln Arg Val Ser Met Ser Arg Asn Ile Glu  
65 70 75  
Ser Arg Ser Thr Ser Pro Trp Asn Tyr Thr Val Thr Trp Asp Pro  
80 85 90  
Asn Arg Tyr Pro Ser Glu Val Val Gln Ala Gln Cys Arg Asn Leu  
95 100 105  
Gly Cys Ile Asn Ala Gln Gly Lys Glu Asp Ile Ser Met Asn Ser

Sequence Listing - P3230R1C1.txt

110 115 120

Val Pro Ile Gln Gln Glu Thr Leu Val Val Arg Arg Lys His Gln  
125 130 135

Gly Cys Ser Val Ser Phe Gln Leu Glu Lys Val Leu Val Thr Val  
140 145 150

Gly Cys Thr Cys Val Thr Pro Val Ile His His Val Gln  
155 160

<210> 161

<211> 2380

<212> DNA

<213> Homo Sapien

<400> 161

acactggcca acaaaaaacg aaagcactcc gtgctggaag taggaggaga 50  
gtcaggactc ccaggacaga gagtgcacaa actaccagc acagcccct 100  
ccgccccctc tggaggctga agagggattc cagcccctgc caccacaga 150  
cacgggctga ctgggggtgc tgccccctt gggggggggc agcacagggc 200  
ctcaggcctg ggtgccacct ggcacctaga agatgcctgt gccctggttc 250  
ttgtgtctct tggcactggg ccgaagccca gtggtccttt ctctggagag 300  
gcttggtggg cctcaggacg ctaccactg ctctccgggc ctctctgcc 350  
gcctctggga cagtgcata ctctgcctgc ctggggacat cgtgcctgct 400  
ccggggcccc tgctggcgcc tacgcactg cagacagagc tgggtctgag 450  
gtgccagaag gagaccgact gtgacctctg tctgcgtgtg gctgtccact 500  
tggccgtgca tgggcactgg gaagagcctg aagatgagga aaagtttga 550  
ggagcagctg actcaggggt ggaggagcct aggaatgcct ctctccaggc 600  
ccaagtcgtg ctctccttcc aggcctaccc tactgcccgc tgcgtcctgc 650  
tggaggtgca agtgctgct gcccttgctg agtttggtca gtctgtgggc 700  
tctgtggtat atgactgctt cgaggctgcc ctagggagtg aggtacgaat 750  
ctggtcctat actcagccca ggtacgagaa ggaactcaac cacacacagc 800  
agctgcctgc cctgccctgg ctcaacgtgt cagcagatgg tgacaacgtg 850  
catctgggtc tgaatgtctc tgaggagcag cacttcggcc tctccctgta 900  
ctggaatcag gtccagggcc ccccaaaacc ccggtggcac aaaaacctga 950  
ctggaccgca gatcattacc ttgaaccaca cagacctggt tcctgcctc 1000

Sequence Listing - P3230R1C1.txt

tgtattcagg tgtggcctct ggaacctgac tccgttagga cgaacatctg 1050  
ccccctcagg gaggaccccc gcgcacacca gaacctctgg caagccgccc 1100  
gactgcgact gctgacctg cagagctggc tgctggacgc accgtgctcg 1150  
ctgcccgcag aagcggcact gtgctggcgg gctccgggtg gggaccctg 1200  
ccagccactg gtcccaccgc ttctctggga gaacgtcact gtggacaagg 1250  
ttctcgagtt cccattgctg aaaggccacc ctaacctctg tgttcagggtg 1300  
aacagctcgg agaagctgca gctgcaggag tgcttggtgg ctgactcct 1350  
ggggcctctc aaagacgatg tgctactgtt ggagacacga ggcccccagg 1400  
acaacagatc cctctgtgcc ttggaacca gtggctgtac ttcactacc 1450  
agcaaagcct ccacgagggc agctgcctt ggagagtact tactacaaga 1500  
cctgcagtca ggccagtgtc tgcagctatg ggacgatgac ttgggagcgc 1550  
tatgggcctg ccccatggac aaatacatcc acaagcgtg ggcctcgtg 1600  
tggctggcct gcctactctt tgccgtgcg cttccctca tctccttct 1650  
caaaaaggat cacgcgaaag ggtggctgag gctctgaaa caggacgtcc 1700  
gctcgggggc ggccgccagg ggccgcgcgg ctctgctcct ctactagcc 1750  
gatgactcgg gtttcgagcg cctgggtggc gccctggcgt cggccctgtg 1800  
ccagctgccg ctgcgcgtgg ccgtagacct gtggagccgt cgtgaactga 1850  
gcgcgcaggg gcccgtggct tggtttcacg cgcagcggcg ccagaccctg 1900  
caggagggcg gcgtggtggt cttgctcttc tctccgggtg cggtggcgct 1950  
gtgcagcgag tggctacagg atgggggtgtc cgggcccggg gcgcacggcc 2000  
cgcacgacgc ctccgcgcc tcgtcagct gcgtgctgcc cgacttctg 2050  
cagggccggg cgcccgag ctacgtggg gcctgcttcg acaggctgct 2100  
ccaccggac gccgtaccg ccttttccg caccgtgcc gtcttcacac 2150  
tgccctcca actgcagac ttctggggg ccctgcagca gcctcgcgc 2200  
ccggttccg ggcggtcca agagagagcg gagcaagtgt cccgggccct 2250  
tcagccagcc ctgtagct acttccatcc cccggggact cccgcgcgg 2300  
gacgcggggt gggaccagg gcgggacctg gggcggggga cgggactaa 2350

Sequence Listing - P3230R1C1.txt

ataaaggcag acgctgtttt tctaaaaaaa 2380

<210> 162

<211> 705

<212> PRT

<213> Homo Sapien

<400> 162

Met Pro Val Pro Trp Phe Leu Leu Ser Leu Ala Leu Gly Arg Ser  
1 5 10 15

Pro Val Val Leu Ser Leu Glu Arg Leu Val Gly Pro Gln Asp Ala  
20 25 30

Thr His Cys Ser Pro Gly Leu Ser Cys Arg Leu Trp Asp Ser Asp  
35 40 45

Ile Leu Cys Leu Pro Gly Asp Ile Val Pro Ala Pro Gly Pro Val  
50 55 60

Leu Ala Pro Thr His Leu Gln Thr Glu Leu Val Leu Arg Cys Gln  
65 70 75

Lys Glu Thr Asp Cys Asp Leu Cys Leu Arg Val Ala Val His Leu  
80 85 90

Ala Val His Gly His Trp Glu Glu Pro Glu Asp Glu Glu Lys Phe  
95 100 105

Gly Gly Ala Ala Asp Ser Gly Val Glu Glu Pro Arg Asn Ala Ser  
110 115 120

Leu Gln Ala Gln Val Val Leu Ser Phe Gln Ala Tyr Pro Thr Ala  
125 130 135

Arg Cys Val Leu Leu Glu Val Gln Val Pro Ala Ala Leu Val Gln  
140 145 150

Phe Gly Gln Ser Val Gly Ser Val Val Tyr Asp Cys Phe Glu Ala  
155 160 165

Ala Leu Gly Ser Glu Val Arg Ile Trp Ser Tyr Thr Gln Pro Arg  
170 175 180

Tyr Glu Lys Glu Leu Asn His Thr Gln Gln Leu Pro Ala Leu Pro  
185 190 195

Trp Leu Asn Val Ser Ala Asp Gly Asp Asn Val His Leu Val Leu  
200 205 210

Asn Val Ser Glu Glu Gln His Phe Gly Leu Ser Leu Tyr Trp Asn  
215 220 225

Gln Val Gln Gly Pro Pro Lys Pro Arg Trp His Lys Asn Leu Thr  
230 235 240

# Sequence Listing - P3230R1C1.txt

Gly Pro Gln Ile Ile Thr Leu Asn His Thr Asp Leu Val Pro Cys  
 245 250 255  
 Leu Cys Ile Gln Val Trp Pro Leu Glu Pro Asp Ser Val Arg Thr  
 260 265 270  
 Asn Ile Cys Pro Phe Arg Glu Asp Pro Arg Ala His Gln Asn Leu  
 275 280 285  
 Trp Gln Ala Ala Arg Leu Arg Leu Leu Thr Leu Gln Ser Trp Leu  
 290 295 300  
 Leu Asp Ala Pro Cys Ser Leu Pro Ala Glu Ala Ala Leu Cys Trp  
 305 310 315  
 Arg Ala Pro Gly Gly Asp Pro Cys Gln Pro Leu Val Pro Pro Leu  
 320 325 330  
 Ser Trp Glu Asn Val Thr Val Asp Lys Val Leu Glu Phe Pro Leu  
 335 340 345  
 Leu Lys Gly His Pro Asn Leu Cys Val Gln Val Asn Ser Ser Glu  
 350 355 360  
 Lys Leu Gln Leu Gln Glu Cys Leu Trp Ala Asp Ser Leu Gly Pro  
 365 370 375  
 Leu Lys Asp Asp Val Leu Leu Leu Glu Thr Arg Gly Pro Gln Asp  
 380 385 390  
 Asn Arg Ser Leu Cys Ala Leu Glu Pro Ser Gly Cys Thr Ser Leu  
 395 400 405  
 Pro Ser Lys Ala Ser Thr Arg Ala Ala Arg Leu Gly Glu Tyr Leu  
 410 415 420  
 Leu Gln Asp Leu Gln Ser Gly Gln Cys Leu Gln Leu Trp Asp Asp  
 425 430 435  
 Asp Leu Gly Ala Leu Trp Ala Cys Pro Met Asp Lys Tyr Ile His  
 440 445 450  
 Lys Arg Trp Ala Leu Val Trp Leu Ala Cys Leu Leu Phe Ala Ala  
 455 460 465  
 Ala Leu Ser Leu Ile Leu Leu Leu Lys Lys Asp His Ala Lys Gly  
 470 475 480  
 Trp Leu Arg Leu Leu Lys Gln Asp Val Arg Ser Gly Ala Ala Ala  
 485 490 495  
 Arg Gly Arg Ala Ala Leu Leu Leu Tyr Ser Ala Asp Asp Ser Gly  
 500 505 510

Sequence Listing - P3230R1C1.txt

Phe Glu Arg Leu Val Gly Ala Leu Ala Ser Ala Leu Cys Gln Leu  
515 520 525

Pro Leu Arg Val Ala Val Asp Leu Trp Ser Arg Arg Glu Leu Ser  
530 535 540

Ala Gln Gly Pro Val Ala Trp Phe His Ala Gln Arg Arg Gln Thr  
545 550 555

Leu Gln Glu Gly Gly Val Val Val Leu Leu Phe Ser Pro Gly Ala  
560 565 570

Val Ala Leu Cys Ser Glu Trp Leu Gln Asp Gly Val Ser Gly Pro  
575 580 585

Gly Ala His Gly Pro His Asp Ala Phe Arg Ala Ser Leu Ser Cys  
590 595 600

Val Leu Pro Asp Phe Leu Gln Gly Arg Ala Pro Gly Ser Tyr Val  
605 610 615

Gly Ala Cys Phe Asp Arg Leu Leu His Pro Asp Ala Val Pro Ala  
620 625 630

Leu Phe Arg Thr Val Pro Val Phe Thr Leu Pro Ser Gln Leu Pro  
635 640 645

Asp Phe Leu Gly Ala Leu Gln Gln Pro Arg Ala Pro Arg Ser Gly  
650 655 660

Arg Leu Gln Glu Arg Ala Glu Gln Val Ser Arg Ala Leu Gln Pro  
665 670 675

Ala Leu Asp Ser Tyr Phe His Pro Pro Gly Thr Pro Ala Pro Gly  
680 685 690

Arg Gly Val Gly Pro Gly Ala Gly Pro Gly Ala Gly Asp Gly Thr  
695 700 705

<210> 163

<211> 2478

<212> DNA

<213> Homo Sapien

<400> 163

gtcagtgcgg gaggccggtc agccaccaag atgactgaca gggtcagctc 50

tctgcagcac actaccctca agccacctga tgtgacctgt atctccaaag 100

tgagatcgat tcagatgatt gttcatccta cccccacgcc aatccgtgca 150

ggcgatggcc accggctaac cctggaagac atcttccatg acctgttcta 200

ccacttagag ctccaggtca accgcaccta ccaaatgcac cttggaggga 250

Sequence Listing - P3230R1C1.txt

agcagagaga atatgagttc ttcggcctga cccctgacac agagttcctt 300  
ggcaccatca tgatttgcgt tcccacctgg gccaaaggaga gtgccccta 350  
catgtgccga gtgaagacac tgccagaccg gacatggacc tactccttct 400  
ccggagcctt cctgttctcc atgggcttcc tcgtcgagcgt actctgctac 450  
ctgagctaca gatatgtcac caagccgcct gcacctcca actccctgaa 500  
cgtccagcga gtcctgactt tccagccgct gcgcttcac caggagcacg 550  
tctgatccc tgtctttgac ctacagcggc ccagcagctt ggcccagcct 600  
gtccagtact cccagatcag ggtgtctgga cccagggagc ccgaggagc 650  
tccacagcgg catagcctgt ccgagatcac ctactaggg cagccagaca 700  
tctccatcct ccagccctcc aacgtgccac ctccccagat cctctccca 750  
ctgtcctatg ccccaaacgc tgcccctgag gtcggggccc catcctatgc 800  
acctcaggtg acccccgaag ctcaattccc attctacgcc ccacaggcca 850  
tctctaaggt ccagccttcc tcctatgccc ctcaagccac tccggacagc 900  
tggcctccct cctatggggt atgcatggaa ggttctggca aagactcccc 950  
cactgggaca ctttctagtc ctaaacacct taggcctaaa ggtcagcttc 1000  
agaaagagcc accagctgga agctgcatgt taggtggcct ttctctgcag 1050  
gaggtgacct ccttggctat ggaggaatcc caagaagcaa aatcattgca 1100  
ccagcccctg gggatttgca cagacagaac atctgacca aatgtgctac 1150  
acagtgggga ggaagggaca ccacagtacc taaagggcca gctccccctc 1200  
ctctcctcag tccagatcga gggccacccc atgtccctcc ctttgcaacc 1250  
tccttcgggt ccatgttccc cctcggacca aggtccaagt ccctggggcc 1300  
tgctggagtc ctttgtgtgt cccaaggatg aagccaagag cccagcccct 1350  
gagacctcag acctggagca gcccacagaa ctggattctc tttcagagg 1400  
cctggccctg actgtgcagt gggagtcctg aggggaatgg gaaaggcttg 1450  
gtgcttctc cctgtcccta cccagtgtca catccttggc tgtcaatccc 1500  
atgcctgccc atgccacaca ctctcgatc tggcctcaga cgggtgcct 1550  
tgagagaagc agaggagtg gcatgcaggg cccctgccat ggggtcgctc 1600  
ctcaccggaa caaagcagca tgataaggac tgcagcgggg gagctctggg 1650



Sequence Listing - P3230R1C1.txt

gagcagcttg ttagacaag cgcgtgctcg ctgagccctg caaggcagaa 1700  
atgacagtgc aaggaggaaa tgcagggaaa ctcccagggt ccagagcccc 1750  
acctcctaac accatggatt caaagtgtc agggaatttg cctctccttg 1800  
ccccattcct ggccagtttc acaatctagc tcgacagagc atgaggcccc 1850  
tgctcttct gtcattgttc aaaggtggga agagagcctg gaaaagaacc 1900  
aggcctggaa aagaaccaga aggaggctgg gcagaaccag aacaacctgc 1950  
acttctgcca aggccagggc cagcaggacg gcaggactct agggaggggt 2000  
gtggcctgca gctcattccc agccagggca actgcctgac gttgcacgat 2050  
ttcagcttca ttcctctgat agaacaaagc gaaatgcagg tccaccaggg 2100  
agggagacac acaagccttt tctgcaggca ggagtttcag accctatcct 2150  
gagaatgggg ttgaaagga aggtgagggc tgtggcccct ggacgggtac 2200  
aataacacac tgtactgatg tcacaacttt gcaagctctg ccttgggttc 2250  
agcccatctg ggctcaaatt ccagcctcac cactcacaag ctgtgtgact 2300  
tcaaacaaat gaaatcagtg ccagaaacct cggttcctc atctgtaatg 2350  
tggggatcat aacacctacc tcatggagtt gtggtgaaga tgaaatgaag 2400  
tcattgtctt aaagtgttta atagtgcctg gtacatgggc agtgcccaat 2450  
aaacggtagc tatttaaaaa aaaaaaaa 2478

<210> 164

<211> 574

<212> PRT

<213> Homo Sapien

<400> 164

Met Arg Thr Leu Leu Thr Ile Leu Thr Val Gly Ser Leu Ala Ala  
1 5 10 15

His Ala Pro Glu Asp Pro Ser Asp Leu Leu Gln His Val Lys Phe  
20 25 30

Gln Ser Ser Asn Phe Glu Asn Ile Leu Thr Trp Asp Ser Gly Pro  
35 40 45

Glu Gly Thr Pro Asp Thr Val Tyr Ser Ile Glu Tyr Lys Thr Tyr  
50 55 60

Gly Glu Arg Asp Trp Val Ala Lys Lys Gly Cys Gln Arg Ile Thr  
65 70 75

Sequence Listing - P3230R1C1.txt

Arg Lys Ser Cys Asn Leu Thr Val Glu Thr Gly Asn Leu Thr Glu  
80 85 90

Leu Tyr Tyr Ala Arg Val Thr Ala Val Ser Ala Gly Gly Arg Ser  
95 100 105

Ala Thr Lys Met Thr Asp Arg Phe Ser Ser Leu Gln His Thr Thr  
110 115 120

Leu Lys Pro Pro Asp Val Thr Cys Ile Ser Lys Val Arg Ser Ile  
125 130 135

Gln Met Ile Val His Pro Thr Pro Thr Pro Ile Arg Ala Gly Asp  
140 145 150

Gly His Arg Leu Thr Leu Glu Asp Ile Phe His Asp Leu Phe Tyr  
155 160 165

His Leu Glu Leu Gln Val Asn Arg Thr Tyr Gln Met His Leu Gly  
170 175 180

Gly Lys Gln Arg Glu Tyr Glu Phe Phe Gly Leu Thr Pro Asp Thr  
185 190 195

Glu Phe Leu Gly Thr Ile Met Ile Cys Val Pro Thr Trp Ala Lys  
200 205 210

Glu Ser Ala Pro Tyr Met Cys Arg Val Lys Thr Leu Pro Asp Arg  
215 220 225

Thr Trp Thr Tyr Ser Phe Ser Gly Ala Phe Leu Phe Ser Met Gly  
230 235 240

Phe Leu Val Ala Val Leu Cys Tyr Leu Ser Tyr Arg Tyr Val Thr  
245 250 255

Lys Pro Pro Ala Pro Pro Asn Ser Leu Asn Val Gln Arg Val Leu  
260 265 270

Thr Phe Gln Pro Leu Arg Phe Ile Gln Glu His Val Leu Ile Pro  
275 280 285

Val Phe Asp Leu Ser Gly Pro Ser Ser Leu Ala Gln Pro Val Gln  
290 295 300

Tyr Ser Gln Ile Arg Val Ser Gly Pro Arg Glu Pro Ala Gly Ala  
305 310 315

Pro Gln Arg His Ser Leu Ser Glu Ile Thr Tyr Leu Gly Gln Pro  
320 325 330

Asp Ile Ser Ile Leu Gln Pro Ser Asn Val Pro Pro Pro Gln Ile  
335 340 345

Leu Ser Pro Leu Ser Tyr Ala Pro Asn Ala Ala Pro Glu Val Gly

Sequence Listing - P3230R1C1.txt

350	355	360
Pro Pro Ser Tyr Ala Pro Gln Val Thr Pro Glu Ala Gln Phe Pro		
365	370	375
Phe Tyr Ala Pro Gln Ala Ile Ser Lys Val Gln Pro Ser Ser Tyr		
380	385	390
Ala Pro Gln Ala Thr Pro Asp Ser Trp Pro Pro Ser Tyr Gly Val		
395	400	405
Cys Met Glu Gly Ser Gly Lys Asp Ser Pro Thr Gly Thr Leu Ser		
410	415	420
Ser Pro Lys His Leu Arg Pro Lys Gly Gln Leu Gln Lys Glu Pro		
425	430	435
Pro Ala Gly Ser Cys Met Leu Gly Gly Leu Ser Leu Gln Glu Val		
440	445	450
Thr Ser Leu Ala Met Glu Glu Ser Gln Glu Ala Lys Ser Leu His		
455	460	465
Gln Pro Leu Gly Ile Cys Thr Asp Arg Thr Ser Asp Pro Asn Val		
470	475	480
Leu His Ser Gly Glu Glu Gly Thr Pro Gln Tyr Leu Lys Gly Gln		
485	490	495
Leu Pro Leu Leu Ser Ser Val Gln Ile Glu Gly His Pro Met Ser		
500	505	510
Leu Pro Leu Gln Pro Pro Ser Gly Pro Cys Ser Pro Ser Asp Gln		
515	520	525
Gly Pro Ser Pro Trp Gly Leu Leu Glu Ser Leu Val Cys Pro Lys		
530	535	540
Asp Glu Ala Lys Ser Pro Ala Pro Glu Thr Ser Asp Leu Glu Gln		
545	550	555
Pro Thr Glu Leu Asp Ser Leu Phe Arg Gly Leu Ala Leu Thr Val		
560	565	570
Gln Trp Glu Ser		

<210> 165

<211> 1060

<212> DNA

<213> Homo Sapien

<400> 165

tggcctactg gaaaaaaaaa aaaaaaaaaa aaaagtcacc cgggcccgcg 50

Sequence Listing - P3230R1C1.txt

gtggccacaa catggctgcg gcgccggggc tgctcttctg gctgttcgtg 100  
ctggggggcgc tctgggtgggt cccggggccag tcggatctca gccacggacg 150  
gcgttttctg gacctcaaag tgtgcgggga cgaagagtgc agcatgttaa 200  
tgtaccgtgg gaaagctctt gaagacttca cgggccctga ttgtcgtttt 250  
gtgaatttta aaaaagggtga cgatgtatat gtctactaca aactggcagg 300  
gggatccctt gaactttggg ctggaagtgt tgaacacagt tttgatatt 350  
ttccaaaaga tttgatcaag gtacttcata aatacacgga agaagagcta 400  
catattccag cagatgagac agactttgtc tgctttgaag gaggaagaga 450  
tgattttaat agttataatg tagaagagct ttaggatctt ttggaactgg 500  
aggactctgt acctgaagag tcgaagaaag ctgaagaagt ttctcagcac 550  
agagagaaat ctctgagga gtctcggggg cgtgaacttg accctgtgcc 600  
tgagcccgag gcattcagag ctgattcaga ggatggagaa ggtgctttct 650  
cagagagcac cgagggggctg caggacagc cctcagctca ggagagccac 700  
cctcacacca gcggtctctg ggctaacgct caggagtgct agtcttcgtt 750  
ggacactttt gaagaaattc tgcacgataa attgaaagtg ccgggaagcg 800  
aaagcagaac tggcaatagt tctctgcct cgggtggagcg ggagaagaca 850  
gatgcttaca aagtctgaa aacagaaatg agtcagagag gaagtggaca 900  
gtgcgttatt cattacagca aaggatttcg ttggcatcaa aatctaagtt 950  
tgttttacaa agattgtttt tagtactaag ctgccttggc agtttgcatt 1000  
tttgagccaa acaaaaatat attattttcc cttctaagta aaaaaaaaaa 1050  
aaaaaaaaaa 1060

<210> 166  
<211> 303  
<212> PRT  
<213> Homo Sapien

<400> 166  
Met Ala Ala Ala Pro Gly Leu Leu Phe Trp Leu Phe Val Leu Gly  
1 5 10 15  
Ala Leu Trp Trp Val Pro Gly Gln Ser Asp Leu Ser His Gly Arg  
20 25 30  
Arg Phe Ser Asp Leu Lys Val Cys Gly Asp Glu Glu Cys Ser Met  
35 40 45

Sequence Listing - P3230R1C1.txt

Leu Met Tyr Arg Gly Lys Ala Leu Glu Asp Phe Thr Gly Pro Asp  
           50                  55                  60  
 Cys Arg Phe Val Asn Phe Lys Lys Gly Asp Asp Val Tyr Val Tyr  
           65                  70                  75  
 Tyr Lys Leu Ala Gly Gly Ser Leu Glu Leu Trp Ala Gly Ser Val  
           80                  85                  90  
 Glu His Ser Phe Gly Tyr Phe Pro Lys Asp Leu Ile Lys Val Leu  
           95                  100                 105  
 His Lys Tyr Thr Glu Glu Glu Leu His Ile Pro Ala Asp Glu Thr  
          110                 115                 120  
 Asp Phe Val Cys Phe Glu Gly Gly Arg Asp Asp Phe Asn Ser Tyr  
          125                 130                 135  
 Asn Val Glu Glu Leu Leu Gly Ser Leu Glu Leu Glu Asp Ser Val  
          140                 145                 150  
 Pro Glu Glu Ser Lys Lys Ala Glu Glu Val Ser Gln His Arg Glu  
          155                 160                 165  
 Lys Ser Pro Glu Glu Ser Arg Gly Arg Glu Leu Asp Pro Val Pro  
          170                 175                 180  
 Glu Pro Glu Ala Phe Arg Ala Asp Ser Glu Asp Gly Glu Gly Ala  
          185                 190                 195  
 Phe Ser Glu Ser Thr Glu Gly Leu Gln Gly Gln Pro Ser Ala Gln  
          200                 205                 210  
 Glu Ser His Pro His Thr Ser Gly Pro Ala Ala Asn Ala Gln Gly  
          215                 220                 225  
 Val Gln Ser Ser Leu Asp Thr Phe Glu Glu Ile Leu His Asp Lys  
          230                 235                 240  
 Leu Lys Val Pro Gly Ser Glu Ser Arg Thr Gly Asn Ser Ser Pro  
          245                 250                 255  
 Ala Ser Val Glu Arg Glu Lys Thr Asp Ala Tyr Lys Val Leu Lys  
          260                 265                 270  
 Thr Glu Met Ser Gln Arg Gly Ser Gly Gln Cys Val Ile His Tyr  
          275                 280                 285  
 Ser Lys Gly Phe Arg Trp His Gln Asn Leu Ser Leu Phe Tyr Lys  
          290                 295                 300  
 Asp Cys Phe

Sequence Listing - P3230R1C1.txt

<210> 167

<211> 2570

<212> DNA

<213> Homo Sapien

<400> 167

ccaggaccag ggcgcaccgg ctcagcctct cacttgctag aggccgggga 50  
agagaagcaa agcgcaacgg tgtggtccaa gccgggggctt ctgcttcgcc 100  
tctaggacat acacgggacc ccctaacttc agtccccaa acgcgcaccc 150  
tcgaagtctt gaactccagc cccgcacatc cacgcgcggc acaggcgcgg 200  
caggcggcag gtcccgccg aaggcgatgc gcgcaggggg tcgggcagct 250  
gggctcgggc ggcgggagta gggcccggca gggaggcagg gaggctgcat 300  
attcagagtc gcgggctgcg ccctgggcag aggccgcctt cgctccacgc 350  
aacacctgct gctgccaccg cgccgcgatg agccgcgtgg tctcgtgct 400  
gctgggcgcc gcgtgctct gcggccacgg agccttctgc cgccgcgtgg 450  
tcagcggcca aaaggtgtgt ttgctgact tcaagcatcc ctgctacaaa 500  
atggcctact tccatgaact gtccagccga gtgagctttc aggaggcacg 550  
cctggcttgt gagagtgagg gaggagtctt cctcagcctt gagaatgaag 600  
cagaacagaa gttaatagag agcatgttgc aaaacctgac aaaaccggg 650  
acagggattt ctgatggtga tttctggata gggctttgga ggaatggaga 700  
tgggcaaaca tctggtgcct gccagatct ctaccagtgg tctgatggaa 750  
gcaattccca gtaccgaaac tggtagacag atgaaccttc ctgcggaagt 800  
gaaaagtgtg ttgtgatgta tcaccaacca actgccaatc ctggccttgg 850  
gggtccctac cttaccagt ggaatgatga caggtgtaac atgaagcaca 900  
attatatttg caagtatgaa ccagagatta atccaacagc ccctgtagaa 950  
aagccttatt ttacaaatca accaggagac acccatcaga atgtggttgt 1000  
tactgaagca ggtataattc ccaatctaatt tatgttggtt ataccaacaa 1050  
taccctgct cttactgata ctggttgctt ttggaacctg ttgtttccag 1100  
atgctgcata aaagtaaagg aagaacaaaa actagtccaa accagtctac 1150  
actgtggatt tcaaagagta ccagaaaaga aagtggcatg gaagtataat 1200  
aactcattga cttggttcca gaattttgta attctggatc tgtataagga 1250

Sequence Listing - P3230R1C1.txt

atggcatcag aacaatagct tggaatggct tgaaatcaca aaggatctgc 1300  
aagatgaact gtaagctccc ccttgaggca aatattaaag taatttttat 1350  
atgtctatta ttctatttaa agaataatgct gtgctaataa tggagtgaga 1400  
catgcttatt ttgctaaagg atgcacccaa acttcaaact tcaagcaa 1450  
gaaatggaca atgcagataa agttgttatc aacacgtcgg gagtatgtgt 1500  
gttagaagca attcctttta ttctttcac ctttcataag ttgttatcta 1550  
gtcaatgtaa tgtatattgt attgaaattt acagtgtgca aaagtatttt 1600  
acctttgcat aagtgtttga taaaaatgaa ctgttctaatt atttattttt 1650  
atggcatctc atttttcaat acatgctctt ttgattaaag aaacttatta 1700  
ctgttgtaaa ctgaattcac acacacacaa atatagtacc atagaaaaag 1750  
tttgttttct cgaaataatt catctttcag cttctctgct ttgggtcaat 1800  
gtctaggaaa tctcttcaga aataagaagc tatttcatta agtgtgat 1850  
aaacctctc aaacatttta ctagaggca aggattgtct aatttcaatt 1900  
gtgcaagaca tgtgccttat aattattttt agcttaaaat taaacagatt 1950  
ttgtaataat gtaactttgt taataggtgc ataaacacta atgcagtcaa 2000  
ttgaacaaa agaagtgaca tacacaatat aatcatatg tcttcacacg 2050  
ttgcctatat aatgagaagc agctctctga ggggttctgaa atcaatgtgg 2100  
tccctctctt gccactaaa caaagatggg ttgtcggggg ttgggattga 2150  
cactggaggc agatagttgc aaagttagtc taaggtttcc ctagctgtat 2200  
ttagcctctg actatattag tatacaaaga ggtcatgtgg ttgagaccag 2250  
gtgaatagtc actatcagtg tggagacaag cacagcacac agacatttta 2300  
ggaaggaaaag gaactacgaa atcgtgtgaa aatgggttgg aacctatcag 2350  
tgatcgcata ttcatgtatg agggtttgcg tgagatagaa aatgggtggc 2400  
cctttctgtc ttatctcta gtttcttcaa tgcttacgcc ttgttcttct 2450  
caagagaaaag ttgtaactct ctggtcttca tatgtccctg tgctcctttt 2500  
aaccaaataa agagtctctg ttctgggggg aaaaaaaaaa aaaaaaaaaa 2550  
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<210> 168

Sequence Listing - P3230R1C1.txt

<211> 273

<212> PRT

<213> Homo Sapien

<400> 168

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Gly His Gly Ala Phe Cys Arg Arg Val Val Ser Gly Gln Lys Val  
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Cys Phe Ala Asp Phe Lys His Pro Cys Tyr Lys Met Ala Tyr Phe  
35 40 45

His Glu Leu Ser Ser Arg Val Ser Phe Gln Glu Ala Arg Leu Ala  
50 55 60

Cys Glu Ser Glu Gly Gly Val Leu Leu Ser Leu Glu Asn Glu Ala  
65 70 75

Glu Gln Lys Leu Ile Glu Ser Met Leu Gln Asn Leu Thr Lys Pro  
80 85 90

Gly Thr Gly Ile Ser Asp Gly Asp Phe Trp Ile Gly Leu Trp Arg  
95 100 105

Asn Gly Asp Gly Gln Thr Ser Gly Ala Cys Pro Asp Leu Tyr Gln  
110 115 120

Trp Ser Asp Gly Ser Asn Ser Gln Tyr Arg Asn Trp Tyr Thr Asp  
125 130 135

Glu Pro Ser Cys Gly Ser Glu Lys Cys Val Val Met Tyr His Gln  
140 145 150

Pro Thr Ala Asn Pro Gly Leu Gly Gly Pro Tyr Leu Tyr Gln Trp  
155 160 165

Asn Asp Asp Arg Cys Asn Met Lys His Asn Tyr Ile Cys Lys Tyr  
170 175 180

Glu Pro Glu Ile Asn Pro Thr Ala Pro Val Glu Lys Pro Tyr Leu  
185 190 195

Thr Asn Gln Pro Gly Asp Thr His Gln Asn Val Val Val Thr Glu  
200 205 210

Ala Gly Ile Ile Pro Asn Leu Ile Tyr Val Val Ile Pro Thr Ile  
215 220 225

Pro Leu Leu Leu Leu Ile Leu Val Ala Phe Gly Thr Cys Cys Phe  
230 235 240

Gln Met Leu His Lys Ser Lys Gly Arg Thr Lys Thr Ser Pro Asn  
245 250 255



Sequence Listing - P3230R1C1.txt

Gln Ser Thr Leu Trp Ile Ser Lys Ser Thr Arg Lys Glu Ser Gly  
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Met Glu Val

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<211> 43

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic oligonucleotide probe

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<210> 170

<211> 41

<212> DNA

<213> Artificial Sequence

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<223> Synthetic oligonucleotide probe

<400> 170

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